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Walk to Language: Creating Language Development Opportunities  
for ELL and Non-ELL Kindergarten Students

by

Tracy Klinger

A dissertation to be submitted in partial fulfillment  
of the requirements for the degree of

Doctor of Education  
in  
Leading and Learning

University of Portland  
School of Education

2017

Walk to Language: Creating Language Development Opportunities  
for ELL and Non-ELL Kindergarten Students

by

Tracy Klinger

This dissertation is completed as a partial requirement for the Doctor of Education (EdD) degree at the University of Portland in Portland, Oregon.

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### **Abstract**

A staggering number of students begin school with lagging English language skills, which may impact a child's future achievement in reading and writing. This challenge is disproportionately high for students living in poverty and/or students that are learning English as a second language. The purpose of this research is to measure the impact of an instructional model utilized for kindergarten students, Walk to Language, on English language development and on English language arts skills. This model is unique in that it simultaneously addresses the language development needs of English language learners (ELL) and non-ELL, many of which are students of color. An ex post facto quantitative research design was utilized to evaluate data from a Pacific Northwest school district pilot of the model. The study included 67 kindergarten students from a school participating in the pilot as a treatment group and 96 students from a control group within the district. Results indicated significantly higher scores for native English speaking students in language skills from the treatment group ( $p = .04$ ). This finding supports the hypothesis that non-ELL students would benefit from language instruction. The control group made significantly higher growth on sentence dictation ( $p = .001$ ) and on the English Language Proficiency Assessment 21 (ELPA 21) reading sub-scores ( $p = .04$ ) than treatment students. These

findings indicate that this early intervention model shows inconclusive results as to the potential to elevate the academic performance and growth levels of students from a variety of backgrounds. Additional results, opportunities for future study, and program recommendations are presented.

### **Acknowledgements**

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Finally, I would like to thank public school students and educators everywhere. I am in awe of your passion and commitment to learning. You motivate and inspire me to make our schools the best they can be each and every day. May school always be a safe and encouraging place to learn and chase your dreams.

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## **Chapter 1: Introduction**

Despite the variety of models for instruction and efforts of educators around the country to improve student outcomes, learners in the United States continue to struggle with academic assessments on literacy in comparison to counterparts around the world. On the 2015 National Assessment of Educational Progress (NAEP), only 36% of all fourth grade students performed at a proficient level in reading. Recent data from the NAEP Nation's Report Card show overall gains in reading since the assessment began in 1971, yet limited gains of only one point from 2008 to 2012. Of additional concern is the achievement gap that persists despite targeted efforts to reduce the differences. Although there have been gains in closing the achievement gap overall since the inception of the NAEP assessment in 1971, from 2008 to 2012, reading scores for English language learners (ELL) dropped from an average score of 193 to 191. Scores for non-ELL students grew from 223 to 225 over the same time period, which signifies a growing achievement gap (National Center for Education Statistics, 2013). In addition to achievement data for reading, the achievement gap is evident in national graduation rates. For public high schools in the United States, the 4-year cohort graduation rates for 2013-2014 show students with limited English proficiency graduating at a rate of 62.6%, while the overall graduation rate for all students at 82.3% (National Center for Educational Statistics, 2016). This indicates that some of the challenges in reading and ultimately graduation from high school may be related to a student's language development.

## **Reading and Language**

One of the challenges that our kindergarten through twelfth grade schools are facing stems from a system that has 35%-45% of kindergarten students beginning school with limited readiness skills (Hair, Halle, Terry-Humen, Lavelle, & Calkins, 2006), and nearly one fourth of students starting school with limited language skills (Hair et al., 2006; Nielsen & Friesen, 2012). The language abilities of a child beginning school have a strong relationship to his or her later achievement in reading comprehension (Catts, 2008). This lagging language is disproportionately high for students in poverty (Hair et al., 2006; Nielsen & Friesen, 2012) and for students that are not native-English speakers (Goldenberg, 2008; Hair et al., 2006).

In order to understand the interaction between literacy and language, one must understand that language is the foundation of all learning and takes place through interactions with others and the environment. Students have an innate hunger for knowledge and learning, and therefore seek meaningful, relevant, and practical learning experiences. Deep learning comes when students make meaning from their experiences through language in order to create layers of understanding that will serve them later in life. Educators need to provide students with meaningful experiences that empower students with language, with knowledge, and with thinking skills that support them in making their own sense of the world. Students need opportunities to understand that they are responsible for thinking while assigning their own language and meaning to content and experiences in order to develop critical thinking skills and regulate their behavior. The more language a student has acquired, the more points of

access a child has to learning. Language is the cognitive system for the expression and understanding of meaning and content (Brooks, Swain, Lapkin & Knouzi, 2010; Swain & Lapkin, 2013; Vygotsky, 1986).

Human language is very complex and can be broken down into five major systems: phonology (sounds), semantics (word meaning), syntax (word order and grammar), morphology (forms or words), and pragmatics (social use of language) (Brackenbury & Pye, 2005). Within the literature there are various components of research encompassing this concept of language development and reading with primary grade students, including phonemic awareness, oral language ability, and vocabulary.

One area of content related to this study focuses on the concepts around phonemic awareness, letter knowledge, and basic decoding skills, all of which are critical to beginning reading (Nielsen & Friesen, 2012). Phonemic awareness work such as blending, combining, segmenting, and deleting sounds in words are key skills for students learning to “crack the code” of reading in the pre-reading years of kindergarten and first grade (Speece, Roth, Cooper, & De LaPaz, 1999). Along with phonemic awareness, oral language abilities, both receptive and expressive, are important building blocks of a student’s early literacy skills and go through an important transition in the primary years of school (Speece et al., 1999). In addition to phonemic awareness and oral language, comprehension skills or understanding of content, is an essential component in the development of reading skills. As a student progresses through the school system, vocabulary comes into play in terms of



comprehension and overall reading performance (Kieffer, 2008). A student's development in reading is largely impacted by how all three areas, phonological awareness, oral language, and comprehension, work together in unison and lead to growth (Marulis & Neuman, 2010).

### **Barriers to Learning**

While understanding the role of language in learning, specifically in regard to reading and language arts skill development, there should also be consideration of additional factors that present barriers to learning. Two of the barriers that are relevant to this study include poverty and identification as an English Language Learner (ELL) student.

**Poverty.** Many students that attend a high poverty school begin their elementary career with no prior school experience and gaps in their language development (Evans & Wachs, 2010). This is of concern to schools as research has identified a relationship between low language skills and low academic achievement, especially in reading. In addition, there is an expanding research base that acknowledges the impact of poverty and other familial components such as chaos that influence language development in children (Evans & Wachs, 2010).

Lichter and Wethington (2010) point out that chaos may or may not be associated with poverty and its influence on children is not new. Chaos has moved from the macrosystem level of politics and world events of the past, to the microsystem level that directly influences families today. When one considers the challenges facing children's environments a century ago, today they are being raised

under more stable, safe, and healthy circumstances. The concern now is centered on the instability of the family structure combined with economic conditions that promote chaos in the lives of many children.

Instability and disorganization are two major challenges associated with chaos influencing children and their development today (Vernon-Feagans, Garret-Peters, Willoughby, Mills-Koonce, & The Family Life Project Key Investigators, 2012). Disorganization was found to be the key predictor related to both receptive and expressive language development. The noise level in homes was found to be a factor of disorganization and leads to a connection between noise and its impact on language and literacy for school age children. Instability for these families often comes in the form of poverty or irregular jobs, which have led to greater chaos in family lives. Children may cope by blocking out or withdrawing from the overstimulation at home. The accumulation of chaos in early childhood may be related to less developed language skills and be further influenced by limited parenting on language (Vernon-Feagans et al., 2012). The influence of poverty and chaos on developing children can create barriers to their learning in the classroom.

Many low socioeconomic status (SES) students face challenges with phonological awareness, which is an important precursor to reading (Hagans & Good, 2013). Effective instruction in this key area is necessary in pre-kindergarten, kindergarten, and first grade classrooms. Children from mid or high SES families may have stronger literacy skills based on earlier exposure to phonemic awareness in pre-kindergarten programs and in the home setting. Socioeconomic status may indirectly

impact reading achievement through the elements of poverty that influence the acquisition of phonemic awareness skills (Hagans & Good, 2013).

One response to this challenge could involve early intervention. Justice, Mashburn, Pence, and Wiggins (2008) take this further in stating that comprehensive language intervention should begin in preschool. Continuity between early and later reading necessitates interventions. These researchers stress the importance of quality input that is socially embedded and mediated through interactions with more knowledgeable conversational partners such as adults or teachers. If preschool classrooms were designed with a wide range of vocabulary and varied syntax (word order and grammar) experiences, along with more complex interactions with teachers, students may make accelerated gains in pre-kindergarten that follow them to school. Despite the benefits and opportunities available in preschool, only 55% of all three- and four-year-old children in the United States participate in preschool programming (United States Census Bureau, 2014).

Reading strategies are not enough for students lacking foundational language skills. Decoding skills provide support initially, but it is not enough for the long term reading success of children from poverty. The demands of comprehension become progressively more complex with unfamiliar topics and materials as students advance through school. Critical language skill development begins at home through family interactions and experiences, and exposure to “rare words” or more decontextualized language opportunities through explanation, extensions, elaborations on topics, and

print experiences. Students that have limited exposure to these interactions may struggle to comprehend new content (Nielsen & Friesen, 2012).

**English Language Learners (ELL).** ELL students may have the challenges associated with poverty and familial chaos while also learning a second language. An ELL student can be defined as a “student who speaks English either not at all or with enough limitations that he or she cannot fully participate in mainstream English instruction” (Goldenberg, 2008, p. 10). In addition to comprehending concepts of language development, teachers must have an understanding of second language acquisition (SLA). Second language acquisition is a controversial area of study that is still evolving in practice and research (Celce-Murcia, Brinton, & Snow, 2014).

The controversy over SLA has developed over many years as the need for second language instruction has increased and evolved. One challenge is that many second language educators do not understand the history of SLA and are unaware of the psychological, linguistic, and sociocultural underpinnings of many of the instructional methods (Celce-Murcia, n.d.). A new approach or method seems to develop out of the perceived challenges of the previous model, which leads to theory and methods that are constantly evolving (Clarke, 1982). Clarke warns of educators’ tendency to seek simple solutions or jump onto bandwagons to solve complex issues. Clarke states:

We need to recognize the fact that the dynamic nature of our profession will continue to produce new insights into language, language learning and language teaching, and that these insights will make it possible for us to

improve the way we do our jobs. However, given the complexity of the issues, we would be wise to test ideas against our own knowledge and experience, accepting what we find valuable and rejecting the rest. (pp. 444-445)

Language professionals rely on the practices that have worked for them personally and are encouraged to consider the many frameworks for meaningful language instruction and reflect on the needs of students to design models specific to student needs (Celce-Murcia, n.d.). One does not need to be an educator or work in a school to recognize that instruction from classroom to classroom varies based on the individual providing instruction. Even teachers using the same curriculum with similar strategies can provide differing experiences to students. Some of the variation may depend on the teacher's own experiences as a child as well as his or her personal experiences in teacher education programs. Lortie (1975) refers to the influence of these life experiences on a teacher's practice in his or her own classroom as "the apprenticeship of observation" (p. 61). Mewborn (2006) simplifies this concept by stating, "teachers teach the way they were taught" (p. 30), which makes change in practice difficult.

In addition to variances in instruction that teachers bring to the classroom, there seems to be consensus that there is not one "best" method of instruction or empirical evidence supporting one method over another (Celce-Murcia, n.d.). Thus the debate and controversy continues and ELL students receive services through a variety of methods and models across the nation. Approximately 1 in 9 students are ELL and the ELL population has grown from 2 million to 5 million since 1990

(Goldenberg, 2008). Most ELLs were born in the United States and 76% of ELLs are in elementary schools. Nearly 80% of ELLs are Spanish speaking (Goldenberg, 2008) and the Spanish speaking ELL group is the fastest growing population of second language students. Many of these students are from low SES backgrounds and are at risk for low achievement due to language skills and consequences of poverty (Goldenberg, 2008; Jackson, Schatschneider, & Leacox, 2014) and chaos (Evans & Maxwell, 1997).

A variety of models have provided language support and instruction for this group of students. Goldenberg (2008) shares that 60% of ELL students receive all instruction of content in English with some type of English language instruction or support through pull out groups, content support, instructional aides, or specialized teachers in language development. A small number of ELLs receive all instruction in English with no additional support. The other 40% of students are in programs that utilize their home language to some extent, although it varies widely as to how much or for how long they receive the services. Learning to read in the native language first promotes reading achievement in English as skills and knowledge transfer across languages (Goldenberg, 2008).

First language instructional programs, such as dual-language and immersion programs, have produced positive academic outcomes for most students, although there can be grammatical inaccuracies due to the lack of explicit instruction on grammar forms (Tedick & Wesely, 2015). These models that utilize a student's first language have historically been for Spanish-speaking students, although availability of

these models is on the rise in a variety of languages and locations. As of 2011, approximately 1000 dual language and immersion programs were in existence across the United States (Center for Applied Linguistics, 2014a; 2014b).

Not all ELLs can receive instruction in their native language due to limited availability of bi-lingual teachers and the number of languages represented in many schools. This means that other ELL students are in need of quality instruction that includes explicit teaching of literacy (vocabulary, phonemic awareness, phonics, comprehension and writing) and language. Quality instruction includes structured, direct instruction models that incorporate cooperative and interactive learning opportunities with peers (Goldenberg, 2008).

The most effective ways to teach ELLs is still an area of disagreement as most studies focus on Hispanic students as they represent the largest group. What about schools with many languages represented? Some states and districts have moved towards direct instruction models with a separate period for language as an efficient means to address language instruction as opposed to just integrating language into content instruction (Goldenberg, 2008; Mize & Dantas-Whitney, 2007). Other researchers have found a separate block for oral English language benefits students' language and reading skill development (Saunders, Foorman, & Carlson, 2006). In addition to explicit language instruction, students need instruction in content areas and the language needed for those subject areas in the classroom (Goldenberg, 2008). This integrated approach to content and language instruction is referred to as content-based instruction or CBI (Met, 1999). CBI will be addressed in greater detail in Chapter 2.

For ELL students, language instruction has been provided through explicit language instruction and support as mandated in Title III by the U.S. Department of Education (No Child Left Behind Act of 2001: English Language Acquisition, Language Enhancement, and Academic Achievement Act, 2002). In these traditional models, in spite of comparable needs, non-ELL students have not received explicit language instruction to address their language gaps. These models have left educators with an increasing number of English speaking children in need of explicit language support who are struggling to reach their academic goals.

The literature identifies the lagging language skills of students from low SES households. Students come to school with risk factors and challenges that need to be proactively addressed through models that include explicit instruction in reading skills and language development. The literature also recognizes the high percentage of ELL students living in poverty. ELL students have protections and structures that provide language interventions through Title III funding and guidelines. This leaves a group of English speaking students from impoverished backgrounds, many of which are students of color, with instructional needs that in many cases go unaddressed.

“Students who enter school with limited proficiency in English are at great risk for reading difficulties and have pressing instructional needs that are currently not addressed in elementary schools in the United States” (Kieffer, 2008, p. 866). Schools need to identify strategies and models that address the needs of *all* students that are lacking in foundational language skills, whether due to poverty, chaos, learning English or other circumstances.



**Walk to Language Model**

One model that has traditionally been used for reading instruction, known as Walk to Reading, may provide a structure for addressing the language needs of ELL and non-ELL students in a strategic manner. This model is designed around schools assessing all kindergarten students' language needs and then assigning them to leveled groups for language instruction. More traditional models of language development for kindergarten students provided 30 minutes of language instruction, twice per week to ELL students only. The new model provides 30 minutes of language instruction, 4 times per week, to ELL and native English speaking students based on their language needs. All students, even more proficient students, participate in English language instruction based on their skill and level of language development.

The model presented in this study provides an opportunity for all students, ELL and non-ELL, to receive explicit English language instruction to address their individual needs. The school in the study is classified as 100% free lunch through a federal food program. Approximately one-third of the students in kindergarten are ELL. Based on the literature, without explicit interventions to address the language and reading needs of students, these students will fall behind their peers.

**Purpose Statement**

The purpose of this quantitative research study was to determine the impact of explicit English language instruction in kindergarten for ELL and non-ELL students through the Walk to Language model as measured by the English Language Proficiency Assessment for the 21<sup>st</sup> Century (ELPA21) and a district administered

language screener as well as academic achievement in English language arts as measured by Dynamic Indicator of Basic Early Literacy Skills (DIBELS) composite scores and dictation samples.

For the purpose of the study, the following research questions were addressed:

1. How does the Walk to Language model impact progress in English language development as measured by growth from fall to spring for ELL and non-ELL kindergarten students?
2. How does the Walk to Language model impact progress in English language arts skills as measured by growth from fall to spring for ELL and non-ELL kindergarten students?

These research questions were investigated through a quantitative, ex post facto analysis of institutional data from a Northwest school district that piloted the Walk to Language model. The district collected English language arts data and language development data to determine student growth in these areas. Two schools that were not a part of the pilot have been identified to serve as comparison schools in the analysis of mean scores to measure the impact of the model.

### **Significance of this Study**

The significance of this study lies in evaluating an alternative model of language development for all students. Policymakers and leaders that are faced with providing language development opportunities for students should consider the skills of not only their ELL students, but also their non-ELL students. This model provides

an option for students that maximizes a school's current resources and may therefore be cost effective in serving students.

The majority of current research on language and its relationship to learning is focused on either the language needs of ELL students (Ellis, 2005; Jackson, Schatschneider, & Leacock, 2014; Kieffer, 2008; Krashen, 2013; Lesaux, Rupp, & Siegel, 2007), models of language instruction (Celce-Murcia et al., 2014; Goldenberg, 2008; Han, Vukelich, Buell, & Meacham, 2014), interventions to develop reading skills (Marulis & Neuman, 2010; Nielsen & Friesen, 2012), or the impact of poverty or chaos on student learning (Evans & Maxwell, 1997; Evans & Wachs, 2010; Hart & Risley, 2003; Vernon-Feagans et al., 2012). This study is unique in that it considers the effectiveness of a model that addresses the language abilities of *all* students regardless of their socioeconomic status or English language ability in order to improve reading outcomes for all students.

### **Theoretical Framework**

The overarching theoretical core for this study comes from the work of Vygotsky and the sociocultural theory (SCT). In addition to the theoretical underpinnings of Vygotsky, Chapter 2 will embed aspects of Bronfenbrenner's bioecological model (1979) as well as work from Krashen (2013) and Ellis (2005) on second language acquisition into the empirical foundation for this study. These frameworks align with the foundation of Vygotsky and the SCT.

Vygotsky described physical and semiotic tools that enable people to change and influence their social environments. These changes in environment influence the

individual and how they interact with their physical and social environment.

Vygotsky's work was different from other psychologists of the time in that the social environment was seen as a *source* of mental development, not just the *context* of development as a set process (Swain & Deters, 2007). Vygotsky asserted that emotions and affect develop along with cognition, not as two separate processes, as many others believe. Social interaction is a key to this development (Swain & Lapkin, 2013).

Children learn language through social interactions and then think in terms of that language. In addition, language creates the context for activity and reflective thinking. Vygotsky's sociocultural theory is based on the premise that human inquiry and learning is embedded within culture and the tools from social history, and that history is pivotal in development and education. With cultural historical development there is a more static set of tools that enable society to move to a higher level of cognitive awareness and culturally approved consequences (Glassman, 2001). The key components of sociocultural theory include how the mind changes, develops, and is influenced by interaction, private speech, mediation, and the zone of proximal development (Lantolf & Beckett, 2009).

Vygotsky's work had a considerable influence on the present study. The SCT identifies many of the factors outside of school such as poverty, chaos, culture and history that are influencing student learning and success in schools. It also provides an understanding of language development and its link to learning, including the needs of

students whose primary language is not English. The SCT grounds this study in theory that has stood the test of time.

### **Summary**

Students in our schools continue to struggle with reading. Success in reading can be predicted by students' language skills at a young age. Many students are starting school with gaps in their language development. These lagging skills may be due in part to elements of poverty and familial chaos. In addition, ELL students, many of whom live in poverty, may have the additional challenge of learning English as an additional language. The Walk to Language model may provide an alternative method of instruction that addresses the language needs of all students, regardless of their ELL status.

Chapter Two provides a review of the literature related to language development as well as the barriers and strategies to improve language for students. Chapter Three provides the methodology and research design for the proposed study and Chapter Four documents the results of the study. In Chapter Five there is a discussion and analysis of the results of the study with recommendations for future work.

## **Chapter 2: Review of the Literature**

This chapter provides a review of significant research linked to the language development of young students as related to this study. The theoretic foundation of Vygotsky's sociocultural theory is described in terms of language development through the use of private speech, mediation, and the cognitive changes and development that take place. Barriers and impacts on language development are discussed, specifically the influence of familial chaos on English language proficiency. Elements of instruction that improve language such as the input, output, context, as well as how an individual's needs and strengths are evaluated and utilized during instruction are considered. In addition, current research on instructional models, including components related to the Walk to Language model are discussed.

### **What is Language?**

Language is the foundation of learning. When one considers the relationship between language and learning in school, the ability to use academic language to understand content becomes paramount. Goldenberg (2008) defines academic language as language that "refers to more abstract, complex, and challenging language that will eventually permit you to participate successfully in mainstream classroom instruction" (p. 9). Not only do students need the ability to comprehend what is presented to them, but they also need to produce oral and written academic language to demonstrate knowledge and understanding (Goldenberg, 2008).

Vygotsky (1986) describes the development of language as it proceeds through various levels of mental function. These include private speech and mediation. As

these processes evolve, there are cognitive changes that take place in the individual. The role of interactions with others and the world is paramount in developing and influencing these mental processes.

**Private speech.** Higher-level mental functions develop through social activity. Mental processing happens at a social level, between people, and eventually within the individual. Kozulin (1986) described this concept of private speech as an interwoven process, where communication takes place as external stimuli becomes inner dialogue and ultimately as an expression of inner private thought. Kozulin (1986) states, “inner speech becomes a psychological interface between, on the one hand, culturally sanctioned symbolic system and, on the other hand, private ‘language’ and imagery” (p. xxxviii). Private speech describes the role of speech and language in transforming external speech and interactions to internal private speech or self-talk, which leads to self-regulation and ultimately behavior regulation (Hausfather, 1996).

Private speech is for one’s self and is a psychological tool that describes how individuals communicate with themselves. Private speech is often covert self-talk, but becomes more intentional when the individual needs to regulate or control his or her mental processes in order to self-regulate. Social speech amongst others can also be private speech as an individual verbalizes and then mediates his or her thinking with others (Swain & Lapkin, 2013). Private speech is part of the process of idea creation in that it mediates the formulation of ideas. Private speech can also be described as an egocentric speech in that it is a step toward the development of an internalized tool for

self-regulation and mediation (Karpov & Haywood, 1998). The next layer of language and understanding comes through mediation.

**Mediation.** Mediation is the foundation of the sociocultural theory.

Mediation describes how language is utilized as a psychological tool that mediates the mind and organizes more complex levels of thinking (Swain & Lapkin, 2013).

Acquisition of understanding takes place when interaction and acculturation of cultural traits or norms develop into personal meaning and concepts that aid in one's understanding of culture and gestures through our communication with others (Vygotsky, 1978). Higher-level thinking tools, such as private speech, gestures, and language signals or techniques, are used to mediate the world and self-regulate the individual. "Cultural artifacts, tools, and signs create who we are and how we view the world, while we recreate and transform the cultural artifacts we have inherited" (Hausfather, 1996, p. 12).

Mediation is observable with toddlers as they learn to regulate concrete items such as toys and objects. Children begin to internalize and make meaning through their interactions, until they understand those interactions through language or self-regulation. Self-regulation can occur when language is internalized or moved from the social plane to psychological plane. Vygotsky calls this movement from intermental functioning to intramental functioning. Language shifts from being *social* to being about the *individual*. Language is not just used for communication, but to mediate higher mental functioning (Swain & Lapkin, 2013), which is needed in school for learning.



In discussion of Vygotsky and sociocultural theory, Karpov and Haywood (1998) identify two types of mediation, metacognitive and cognitive. Metacognitive mediation can be described as executive processes such as self-regulation, self-planning, self-monitoring, self-checking, or self-evaluating. An example of metacognitive mediations can be observed in a child that is told “no” by a parent. The parent action of saying no is repeated over time until the child starts to say no out loud and eventually tells himself or herself no in his or her head. The child’s social interaction with a parent is eventually internalized and private speech regulates the child’s behavior in future interactions. The adult’s responsibility of being a leader, teacher, or parent is to summarize, question, clarify, and predict in order to support regulating the child’s problem-solving skills and learning. There is a “gradual transfer of responsibility for planning, directing, monitoring, checking and evaluating from the adult to the child in the course of their collaborative activity” (Karpov & Haywood, 1998, p. 29).

Karpov and Haywood (1998) state that cognitive mediation is the “acquisition of scientific concepts representing the essence of some class of phenomena” (p. 27). Cognitive mediation is not just development of verbal knowledge, but mastery of procedures and content. Empirical learning occurs through comparing objects and events, finding patterns and creating a general understanding of a concept. The concept development can vary based on a child’s age, development, and social experiences. Theoretical learning develops around methods for analysis,

characteristics of events, and symbolic or graphic models. These methods become tools for problem solving.

Mediation leads to higher, complex thinking skills, which are mediated by tools such as language, signs and symbols. Adults teach tools to children, children internalize the tools, and they become part of the child's mediation process (Karpov & Haywood, 1998). Individuals must learn to anticipate and understand what tools others are using to mediate in order to understand others' motives and goals. An individual's behavior is influenced by the tools he or she has developed and has available to mediate (Swain & Deters, 2007).

Vygotsky's work is respected as a framework for language acquisition and development. The importance of social interactions in the development of identity, language, and self-regulation are influenced by an individual's transition through private speech and mediation. This process extends into the realm of second language acquisition (SLA). Vygotsky (1986) addressed SLA through his concept of mediation when he stated, "in learning a new language one does not return to the immediate world of objects and does not repeat past linguistic developments, but uses instead the native language as a mediator between the world of objects and the new language" (p. 161). The study of second language acquisition is a complex and controversial field of study that is rapidly evolving.

**Cognitive changes and development.** Traditional psychologists focus on the construction of knowledge within the individual. Individuals interact with a static world "constructing internal representations of external realities" (Hausfather, 1996, p.

11). Using sociocultural theory, the best way to understand the mind is to study how it changes. The world influences the individual and the individual influences the world, which leads to growth. For a child, development is a complex process between the child and his or her social environment (Hausfather, 1996). Language is seen as a “tool of the mind” that leads to cognitive development, thought, and stabilization of the psyche (Swain & Deters, 2007).

Understanding is developed through interactions with others, self, social, historical, and cultural tools. An individual’s tools and development are unique based on their personal history, motivations, goals, and actions (Swain & Deters, 2007). Vygotsky theorized that cultural artifacts are conceptual like language and material objects. Cultural and symbolic artifacts are used to mediate and understand the world by coordinating human activity with the physical world and socially with others. Signs are developed through a series of transformations and experiences that are not just passed down or invented by adults. An individual’s interaction and perception of those signs and symbols make their meaning unique. School is a social environment and culture where people interact with each other across various cultural perspectives and influences. Social processes dominate our consciousness and Vygotsky believed education was central to cognitive development (Hausfather, 1996).

### **What Impacts Language?**

Clearly if language development and learning are influenced by the interactions one has with others and the world as Vygotsky has established, there are

factors that present challenges to the development of language. Two of these challenges have a direct impact related to this study, poverty and English proficiency.

**Chaos and poverty.** In order to understand better how the Walk to Language model at the center of this study is a method to mitigate the potential effects of chaos, one must take a deeper look at the various factors related to chaos that influence learning in children. Evans and Wachs (2010) provide an ecological perspective based on Bronfenbrenner's bioecological model presented in 1979. The model addresses the connection between a person, his or her environment, and the interaction between the two (Bronfenbrenner, 1979). Environmental chaos is a term that has been increasingly used by researchers to describe this phenomenon.

Elements of chaos include (a) parental maladjustment; (b) visual complexity; (c) clutter and messiness; (d) low supervision and monitoring; (e) multiple caregivers; (f) hurriedness and time pressure; and (g) cynicism and generalized mistrust of institutions. A high workload coupled with nonstandard work hours or unstable employment may lead families to higher levels of fear and uncertainty. Initial research in this area focused on the impact of noise levels and cognitive input, especially language. High noise levels influenced the processing of auditory input and impacted language, which interferes with information processing and sensitivity to incidental information (Evans & Wachs, 2010).

Evans and Maxwell (1997) studied the harmful effects of chronic noise and how it influences deficits in reading. The researchers hypothesized that the link between noise and reading was caused by disruptions in language acquisition.

Students that met criteria for attending a noisy school, noise levels of 65 decibels or more over a 24-hour period, also lived in a noisy neighborhood. In this study, students from a controlled environment had schools and neighborhoods with noise levels below the 65 decibels threshold. All students in the study were native English speakers and had normal results on a hearing screening. The study evaluated two components of language acquisition, speech perception and phoneme comprehension of students that had been exposed to noise from aircrafts. The Woodcock-Johnson Reading Mastery Test was used to assess reading skills.

Results from the study replicate other research demonstrating the association between noise exposure levels and reading as chronic noise exposure was shown to significantly correlate with reading scores ( $r = -0.58$ ,  $p < .001$ ). In addition, this study confirmed that the impact was due to chronic noise exposure and not just noise during the testing session. Another important finding was that language acquisition was found to be a link between noise and reading deficits (Evans & Maxwell, 1997).

Other researchers have studied the impact of poverty on the development and learning of young children. Vernon-Feagans, Garret-Peters, Willoughby, Mills-Koonce, & The Family Life Project Key Investigators (2012) worked to understand how indicators of poverty and chaos in a child's life impact language development skills. The authors suggest that parenting impacts a child's development of language skills due to household chaos or "systems of frenetic activity, lack of structure, unpredictability in everyday activities, and high levels of ambient stimulation"

(Bronfenbrenner & Evans, 2000, p. 121). Evans and Wachs (2010) add turbulence, instability and disorder as factors of chaos often associated with poverty.

Language develops more quickly when children are engaged in joint activities with their parents or guardians and when caregivers are responsive and attentive to vocalizations from their youngsters (Vernon-Feagans et al., 2012). Parents with lower attainment of education themselves tend to be less responsive to their children, which impacts the child's word learning and grammar abilities. In addition to interactions between children and adults, Johnson and Martin (2010), found that household order, home literacy factors, and maternal reading ability were predictive of expressive language in children.

Evans and Wachs (2010) identify other factors of environmental chaos on development that focus on parental influences. Chaotic homes can have a negative impact on the quality of parental interactions with the child, including a parent's responsiveness to his or her child, involvement in a child's day-to-day activities, promotion of child's exploration, as well as linguistic and object stimulation. These challenges can influence the development of self-regulation skills, emotional and behavioral development, as well as self-efficacy of the child. Physiological consequences are also evident in chaotic environments as there is a dysregulation of physiological stress due to the stressors and demands of a chaotic household. Lastly, chaos may interfere with a child's ability to engage in activities that lead to the development of cultural and self-identity as there may be a lack of systems, traditions and experiences in the household. Evans and Wachs (2010) state "without the ability

to sustain meaningful daily activities and tasks in a regular manner, children and their families cannot acquire a sense of order, continuity, and purpose in life” (p. 7). This issue is further complicated by studies that identify that some children and families are able to adapt to high noise levels. Therefore, the absence of chaos does not necessarily lead to positive consequences.

The key to chaos is to see it in terms of how it impacts the structures and routines surrounding children and their families. Other elements of the “chaos construct” include chronic resource scarcity, unpredictability, and an inability to fit family routines into the resources available, exposure to continuous conflict, and the threat of violence. Some researchers wonder if just one type of chaos (noise, instability, lack of structure) is enough or if the impacts require the convergence of two or more factors to carry the impact (Evans & Wachs, 2010). The research in this section provides examples of the various factors related to chaos that influence learning in children. The Walk to Language model at the center of this study is a method to mitigate the potential effects of chaos on learning in the school setting.

**Child interactions.** The challenges associated with chaos in a family influence the interactions that take place between parents, their child, the school, and community. These interactions can have an impact on the language skills and vocabulary that a child is exposed to as well as the family’s use and interactions with print.

***Conversational interactions.*** Hart and Risley (2003) have spent decades studying the differences in language skills and vocabulary between students from

different socioeconomic status (SES) groups. The original study in 1967 identified large discrepancies between students from low SES backgrounds and university professor's children in their vocabulary development after they implemented a vocabulary intervention at a local preschool. In the study, all students made gains in their individual vocabulary size, but gaps in their original vocabulary levels between the groups remained.

Hart and Risley (2003) began their follow-up study through observations of one- to two-year-old children in homes with their parents as they were learning to talk. The 2½ year study required researchers to spend 1 hour per month with each of the 42 families. After analyzing the recorded conversations from the households in the study, researchers determined that nearly everything children were learning came from their families. Our society has assigned parents the task of socializing their children and this process leads to stark similarities between children and their parents that have implications for their future. Researchers found a range of 86% to 98% of words recorded in a child's vocabulary were words recorded in the parent vocabulary. Children's trends in the amount of talk, vocabulary growth, and style of verbal interactions were established by age 3. As researchers listened to students, "we seemed to hear the parents speaking" (Hart & Risley, 2003, p.7). Children were not only influenced by words parents used in conversation but also with the type of feedback that was provided to the child.

The study also identified differences in the number of parent affirmations and the amount of positive feedback that were provided to children in comparison to



prohibitions or discouragement by the age of three. Professional families had 560,000 more instances of encouraging feedback than prohibitive. For working class families, the difference was 125,000 more opportunities for positive feedback. The data for welfare families differed. There were 144,000 *fewer* encouragements and 84,000 *more* discouragements of behavior than the average child in a working-class home. Students did not have the same level of encouragement to experiment and practice language with supportive feedback in lower SES homes. As children gain language and independence, his or her past experiences, amount and diversity of these experiences, encouragement and feedback, influence which new opportunities they notice and choose for themselves (Hart & Risley, 2003). These new opportunities may be utilized and maximized in school as they learn to decode and read.

***Interactions with print.*** Parent-child interactions with and around print were impacted by social class and likely result in some of the differences in a child's use of decontextualized language (Dickinson & Snow, 1987). Studies have repeatedly found differences in reading achievement based on social class and SES. These discrepancies are not found for contextualized language or the conversational use of language, but for decontextualized skills such as story retell, open-ended questions or explaining concepts. Pre-reading skills and experiences like reading signs and labels develop in all children but do not necessarily lead to the use or transfer of print in a decontextualized manner. Social class did not seem to impact a child's exposure and awareness of print but did impact the experiences that are provided to children that enable them to interpret unfamiliar print and create meaning. Children from higher

SES households have more experience with interpretation of print (Dickinson & Snow, 1987).

Hagans and Good (2013) studied first grade students from low SES backgrounds in the Pacific Northwest. Researchers conducted 10 weeks of phonological awareness intervention with 25 low SES first graders. The study included a control group of 25 students as well as a comparison group of 25 students from mid-SES backgrounds. The study was built around the association between family income and the ecological processes associated with home and school that relate to a child's language and reading abilities. Students that struggle with reading early were likely to continue to struggle as they progress through school. Students from lower SES backgrounds did not have the same opportunities with literacy related activities as higher SES students, such as shared reading activities or exposure to complex vocabulary to develop meaning. Preschool teachers in low SES neighborhoods felt that it was more important to work on behavior and social skills than it was to work on pre-reading literacy and math skills. An analysis of covariance (ANCOVA) was calculated to determine the effects of the phonological awareness instruction on future reading skills. Data analysis indicated that oral reading fluency skills were dependent on the participant's nonsense word fluency skills at pretest. A two-week follow up assessment of oral reading fluency had similar results. This study supports the assertion that variations in SES and the limited meaningful interactions with print, reading activities, and rich vocabulary for low SES students may impact phonological awareness and oral reading fluency. These phonological deficits may be

one of the factors associated with reading differences later in school (Hagans & Good, 2013).

***Community and school.*** Other researchers expanded the work from household poverty to include the impact of family, school and neighborhood factors on SES and children's early reading skills. It is well established that low SES students gain language skills at a slower rate and have risk for reading challenges (Evans & Maxwell, 1997; Evans & Wachs, 2010; Hagans & Good, 2013; Vernon-Feagans et al., 2012). This work builds on the ecological and developmental systems theories of Bronfenbrenner and how the systems around children interact. The child may change over time, but the systems around the child such as home and school environments, evolve and change as well and impact his or her growth and development. Aikens and Barbarin (2008) provide an example of this through a longitudinal study of 21,000 students included kindergarten, first, and third graders. The study considered the various systems and interrelationship of structures in proximity to a child, such as family, neighborhood, and school. The researchers considered how these systems influence early literacy and reading outcomes.

Using the Early Childhood Longitudinal Study, Kindergarten Class of 1997-1998 (ECLS-K) data, it was found that family climate indicators account for disparities in initial literacy and language gaps as students began school. When considering reading growth over time, schools and neighborhood characteristics had a greater influence on growth than family climate. This effect was most prevalent between the spring of kindergarten and spring of first grade when rapid growth

typically occurs. Teacher, classroom, school, and community resources that align with lower SES communities seem to have a bearing on differences in achievement and lead to the belief that a poor neighborhood equals a poor school. In addition, the social composition of a student body was highly related to achievement; more so than any other school factor. There seems to be a cumulative impact of family, neighborhood, and school contexts leading to disparities in reading achievement (Aikens & Barbarin, 2008).

Regardless of the intervention, poverty has a consistent influence on outcomes. McDermott, Rikoon, and Fantuzzo (2013) conducted a study to detect linear and higher order growth in learning behaviors, across the transition years to school from pre-kindergarten through first grade. The team studied 2,152 Head Start students over 3 years and it was determined that learning behaviors such as motivation and persistence, change and influence an individual's academic and socio-emotional school success.

The study found that these key learning behaviors tend to decrease in magnitude over time for students in poverty. Stronger learning behaviors led to better academic outcomes and the effect grew over time, as did the differences between proficient and struggling groups increased over time. This demonstrates how certain behaviors change over time based on whether a student attains academic success. In general, children in the study were found to lose ground in observed motivation and persistence as they transition to kindergarten and first grade. This work supports the need for early intervention strategies in schools to circumvent the impact of poverty

and support students in finding success early on in their school careers when motivation and persistence of the child can be utilized to the fullest (McDermott et al., 2013).

**English language learners and English proficiency.** Another factor in language development and literacy achievement for students is their primary language. Varying terminology is used in reference to students that have been exposed to a non-English language in the home environment. For the purposes of this paper, students that are learning English as a second language will be referred to as an English language learner (ELL). Various researchers and government officials may refer to this group as language minority or limited English proficiency students.

The Spanish-speaking ELL group is the fastest growing population of second language students. A majority of these students are United States citizens; in addition 65% of non-English speaking immigrants speak Spanish. Several factors impact ELLs learning in school. Many of these students are from low SES backgrounds and are at risk for low achievement (Jackson et al., 2014). Mexican immigrants scored lowest on factors related to educational enrichment in the home and had compounding risk factors of low maternal education, low paying jobs, harsh living conditions, inadequate health care, and unstable neighborhoods or elements of chaos. These dynamics can have a collective negative effect on student outcomes. It has been found that English proficiency at the beginning of kindergarten was predictive of the rate of reading growth through school. Vocabulary has also been identified as a key factor in

language and literacy development due to its influence on oral and written comprehension (Jackson et al., 2014).

In 2006, August and Shanahan authored the National Literacy Panel report, which analyzed the state of reading instruction and research in the United States. Since that time, a number of new studies have been published that allow for further evaluation of reading instruction practices. August, McCardle, and Shanahan (2014) provide insight based on new research and instructional focuses. Much of the original National Literacy Panel review included research on Spanish speakers, with some inclusion of other languages, but did not include data on English language proficiency levels. Since the original report in 2006, there has been an increased focus on specific instruction of various skills in reading such as phonological awareness, phonics, vocabulary, fluency, comprehension and writing. ELLs have benefitted from this content instruction, as have their native English-speaking peers (August, McCardle, & Shanahan, 2014).

A student's English proficiency as he or she enters school in kindergarten is a strong predictor of academic achievement in reading over time. Kieffer (2008) conducted a study evaluating the influence of English language proficiency as students enter school. Data from the Early Childhood Longitudinal Study – Kindergarten (ECLS-K) was used to track the reading growth trajectories of more than 17,000 students from fall of kindergarten through the spring of fifth grade. Participants' English language skills were assessed to determine a high or low level of proficiency (Kieffer, 2008).

ELL students with more proficient English skills upon entry to kindergarten had reading growth trajectories that were very similar to those of native English speakers (Kieffer, 2008). The opposite holds true for students with less English proficiency. This group had greater struggles than more proficient peers. Results from the study demonstrate that ELLs with limited English proficiency in kindergarten had lower elevations on their reading growth trajectories over time. These gaps in reading were evident as students began school, grew from first to third grade, and then the gaps remained at a more consistent level through fourth and fifth grade. The lowest performing students over time were the ELLs that had not acquired enough English language proficiency by the end of first grade to participate in the reading assessment. Small challenges with reading achievement in kindergarten and first grade for ELLs grew and persisted into larger challenges in elementary school as the demands of reading increased over time (Kieffer, 2008).

These results became more complex when other identified risk factors on reading difficulties, such as low SES, family background, race, and/or attending a high poverty school were considered in the study (Kieffer, 2008). It was found that ELL students are more likely to experience these risk factors, face poverty, and attend poor schools. When data were controlled for SES, the difference between low proficiency ELL students and native English speaking students narrowed, with both groups struggling. The effects of poverty may be greater for ELL students if they also have limited English proficiency that impacts the ability to access the educational resources allocated to mitigate the effects of poverty (Kieffer, 2008). This study exposes the

challenges that ELL students may face, yet provides evidence that exposure to a language other than English prior to entering school does not by itself put students on a different trajectory than peers. Initial proficiency in English as well as the influence of additional risk factors impact reading achievement for students (Kieffer, 2008).

One key element of early proficiency in a language is the ability to discriminate sounds and pronunciations in a second language. Giambo and McKinney (2004) studied the impact of a phonological awareness intervention on oral language skills for Hispanic children. Students were pre- and posttested on oral English proficiency, English vocabulary and phonological awareness. The study included 80 Hispanic kindergarten students from eight classes in a southeastern United States elementary school. Students participated in a 19-week intervention group of 5 students that met three times per week for 20 to 25 minutes.

Forty students participated in a phonological awareness intervention group that provided explicit instruction on the development of skills such as blending, segmenting, identifying beginning sounds, and letter-to-sound connections. The other 40 students participated in a story-reading group where researchers read a story in English and led story-reading activities that were a part of the language arts curriculum (Giambo & McKinney, 2004). Analysis of pretest data indicated that there were not significant differences between the two groups prior to the intervention. Both groups demonstrated a significant increase in mean scores for oral proficiency from pre- to posttest, although the phonological awareness group performed significantly better on the posttest. The effect size for this group was  $d = 0.58$  and



approximately 68% of students in the group scored above the mean of the story-reading group. There were no significant differences on English vocabulary scores, although the phonological awareness group did show greater results within group pre/posttest effect size. With further analysis, blending and segmenting were the strongest predictors of change in English proficiency, although not all of the variance in proficiency was accounted for in this study. Researchers summarize the findings as support to the hypothesis that phonological awareness supports development of oral English proficiency in native Spanish-speaking children (Giambo & McKinney, 2004).

Once students build proficiency with phonological awareness and early reading skills, one must consider the impact the supplemental reading instruction has on young readers. Gunn, Smolkowski, Biglan and Black (2002) conducted a follow up study of 256 Hispanic and non-Hispanic children in kindergarten through third grade. Prior to the supplemental instruction, below grade level students were given a pretest to determine eligibility for the study; criteria of performance being below the designated proficiency level on two or more baseline measures in reading using the Woodcock-Johnson assessment. In addition to daily reading instruction from the teacher, participants in the study received 30 minutes of small group supplemental reading instruction each day for 4 to 5 months in year 1 and 9 months in year two. Students were also provided instruction over the summer, three times per week for five weeks.

The results indicate that changes in letter-word identification were not significant, although students showed growth in this area with an effect size of  $d =$

0.22 with the supplemental instruction (Gunn, Smolkowski, Biglan, & Black, 2002). In terms of word attack, the treatment group performed significantly better with an effect size of  $d = 0.46$ . When non-Hispanics were considered separately, the improvement was not significant, but for Hispanic children alone the gains were significant with a strong effect size ( $d = 0.74$ ). Students in the treatment group showed significant gains in oral reading fluency, with no significant differences due to ethnicity. Deeper analysis of Hispanic participants indicated significant increases in the areas of word attack ( $d = 0.76$ ), oral reading fluency ( $d = 0.46$ ), and passage comprehension ( $d = 0.38$ ). This study supports the hypothesis that supplemental instruction opportunities in reading may lead Hispanic and non-Hispanic students to greater achievement in reading (Gunn et al., 2002).

Another example is presented in the meta-analysis conducted by Marulis and Neuman (2010) that evaluated 67 studies with 216 effect sizes on the impact of a vocabulary focus on oral language skill development. These researchers identified an overall effect size using Hedge's  $g$  coefficient of  $g = 0.88$  for vocabulary training and interventions for pre-kindergarten and kindergarten students on oral language growth. Word learning for kindergarten age students with vocabulary training yielded a large effect size of  $g = 0.94$ , and even brief vocabulary interventions can lead to positive outcomes. Similar results were found regardless of SES or being identified as at-risk, which means that these interventions may be successful in raising achievement, but may not help close the achievement gap for at-risk youth. This research creates a bridge between vocabulary development and its impact on language development.

Each of these studies has expressed the importance and necessity of early intervention as students begin school in kindergarten to establish positive learning experiences and success for students in reading. Native English speaking and ELL students benefit from targeted, intentional skill development in reading (August et al., 2014). Instruction should focus on developing English proficiency (Kieffer, 2008), phonemic awareness (Giambo & McKinney, 2004), reading skills (Gunn et al., 2002), and vocabulary (Marulis & Neuman, 2010).

Familial chaos and ELL status can present considerable barriers to learning. Language skills and vocabulary attainment can be hindered or encouraged by the interactions and type of feedback that students receive in their home environment. A number of students who are ELLs have challenges associated with poverty as well as cultural traditions and values that may not coincide with the dominant culture in the United States, all in addition to working to become proficient in English.

### **What Improves Language?**

There are a number of strategies and models that have been considered to improve the language and learning abilities of students. Many of the strategies to improve language and literacy skills are the same for ELL and non-ELL students. Studies report similarities in strategies and results for both groups (Echevarria, Short & Powers, 2006; McClure, 2009). For example, all students benefit from clear objectives, visual aids, and direct instruction with the opportunity to practice (McClure, 2009).

Researchers of second language acquisition (SLA) acknowledge the ever-changing landscape of the field. There is professional consensus that there is not one SLA method that is superior to all the rest (Celce-Murcia et al., 2014; Mize & Dantas-Whitney, 2007). Some have speculated as to why that is the case. Prabhu (1990) suggested that some methods are a better fit for various teaching or learning circumstances and that all of the methods have some truth and validity. This makes the argument over good versus bad methods irrelevant, as the effectiveness is dependent on the needs and fit of a model with the school and students. What does become evident is that intentional instructional strategies benefit both ELL and non-ELL students in developing language skills that support their academic learning (Celce-Murcia et al., 2014; Echevarria et al., 2006; McClure, 2009).

**Strategies to improve language.** Ellis (2005) developed a set of generalizations to provide a basis for language teacher educators. The 10 principles are built on multiple researcher perspectives and provide a framework for instructional consideration for students acquiring a second language (L2) but may also be used for non-ELL students. Since 2005, SLA researchers have taken more interest in connecting Vygotsky's sociocultural underpinnings in the influence of social interactions and the use of native language to mediate second language learning. With this increasing understanding of the role of social learning in SLA, Ellis has more recently added two new principles to reflect the influence of the sociocultural theory (Celce-Murcia et al., 2014). Ellis' principles are embedded into the strategies to improve language, which are presented in the next sections of this paper.

Another frequently cited model for SLA comes from Krashen's work. Stephen Krashen (2013) built a language acquisition theory around five interrelated hypotheses that provide a foundation for SLA. One of the hypotheses is the acquisition learning hypothesis, in which Krashen considers the differences between language acquisition and language learning. Language acquisition is seen as subconscious or "picking up" of a language, where there is a predictable order of oral or written skills that are learned. Language learning is a conscious and intentional process, which includes feedback and the correction of mistakes. Learning is formal and may have more focus on rules and grammar (Krashen, 2013). The intentionality of instruction is important to consider when describing strategies to improve student language abilities. These strategies will be broken down into the categories of input, output, content, and addressing the individual needs of students.

***Input.*** Input can be described as information that is taken in through interaction, instruction, listening, reading, or visual support. In terms of language, this is referred to as receptive language. Parental input is one of the key factors impacting a child's language prior to entering the school system, as discussed previously in this chapter (Winsler, Kim, & Richard, 2014). Ellis (2005) offers 4 principles related to instructional input in Table 1, which benefits students' language abilities.

Table 1

*Ellis' Principles in Relation to Input*

| Principle Number | Description of Principle   |
|------------------|--|
| 1                | Instruction needs to ensure that learners develop both a rich repertoire of formulaic expressions and a rule-based competence (p. 33). |
| 3                | Instruction needs to ensure that learners also focus on form (p. 34).  |
| 5                | Instruction needs to take into account the learner's 'built-in syllabus' (p. 37).  |
| 6                | Successful instructed language learning requires extensive L2 input (p. 38).   |

*Note.* As cited in Ellis (2005). *Form* refers to grammar or rules of a language. *Built-in syllabus* refers to the natural order or sequence that individuals acquire language.

Krashen's (2013) framework also has instructional implications in terms of input. One instructional method is to increase "comprehensible input" through intentional strategies such as (a) use of pictures and realia; (b) use of movement; (c) use of slow and clear speech with less complex language; and (d) developmental activities to build language such as games and projects. These activities should have a low demand for output or speaking until the learner is ready and volunteers to produce language (Krashen, 2013). Many of the strategies presented in Krashen's framework have connections to work in sheltered instruction. Sheltered instruction strategies such as visuals, scaffolds, connecting content to student experiences, providing opportunities for student interactions, and the use of supplementary materials have been recommended to better meet the needs of students. These instructional strategies are a component of the input that teachers provide to students. The Sheltered

Instruction Observation Protocol (SIOP) was developed to provide educators an explicit model for planning and providing instruction (Echevarria et al., 2006).

Echevarria, Short and Powers (2006) conducted a study to evaluate the impact of the Sheltered Instruction Observation Protocol. All students, not just ELL students, benefit from high quality instructional strategies such as clear learning objectives and the development of background knowledge. In addition, the SIOP model incorporates language objectives and contextual language practice. The study included 346 students in Grades 6 to 8 and a comparison group of 94 students on the east and west coast of the United States. Students were assessed using the Illinois Measurement of Annual Growth in English (IMAGE), a standardized assessment from the state. Researchers found a significant positive impact for the intervention (SIOP) group on three of five subtests. Intervention students demonstrated significantly better gains in writing and language. The effect size of the intervention was  $d = 0.83$ , and students in the intervention group gained an average of 2.9 points out of 25 between pre/posttests, while the comparison group gained 0.7 points.

Grammar instruction is an area of disagreement amongst SLA researchers. Some suggest that grammar should be identified and taught through communicative use or in an inductive manner. Krashen (2013) suggests that the purpose of grammar instruction should take place to satisfy student curiosity about the structure of language and to fill in gaps of incomplete acquisition. Others believe in a deductive approach where grammar is explicitly taught through direct instruction, in a predetermined sequence, with corrective feedback is necessary (Mize & Dantas-

Whitney, 2008). Mize and Dantas-Whitney (2008) share that in a deductive approach, there is concern that input can become “reductionist” and only emphasize grammar as opposed to opportunity to learn grammar in context or within content.

Another area of focus in early literacy development is phonological awareness. Winsler, Kim, and Richard (2013) recently conducted a study on the impact of a phonological awareness intervention with 50 first grade students from low SES backgrounds. The intervention provided explicit phonological awareness instruction in a small group setting, 4 days per week for 20 to 25 minutes. The researchers found phonological awareness to be an important prerequisite skill for reading, but also recognized that when used in isolation it is not a critical reading skill. The researchers identified differences in literacy skills between various levels of SES may be explained by phonological awareness abilities as measured by Dynamic Indicators of Basic Early Literacy Skills (DIBELS). The phonemic awareness intervention did decrease the difference in early literacy skills as measured by phoneme segmentation fluency and nonsense word fluency, but researchers caution that this does not necessarily lead to fluent reading. The intervention did not translate into comparable oral reading fluency skills by the middle of first grade for low SES and mid to high SES students. Study results indicate that the intervention may have been too late, and Winsler et al. speculate that students need a quality program in kindergarten in order to start first grade with solid phonemic awareness skills needed to begin reading in first grade, instead of trying to do both at once. They conclude “it may be imperative



to intervene early to make the greatest impact on the reading trajectories of children, especially those at risk of developing reading problems” (p. 112).

As reading skills are developed, input through individual reading is also recommended. Krashen (2013) identifies two types of reading that pose benefits. Free reading or independent reading in a second language, shows a relationship with second language competence (Krashen, 2013). Some educators refer to this as sustained silent reading (SSR) or reading for pleasure (Krashen, 2006). Krashen argues that this form of input is the most powerful in mitigating the impact of poverty among young learners as it allows students to focus on individual interests and explore personal talents (Krashen, 2016). Krashen (2013) also believes that narrow reading, where extensive reading is completed on a particular topic or author, develops vocabulary, discourse, review of concepts, and creates more contextual knowledge. This type of reading helps ensure that the content from text is comprehensible as there is a natural repetition of vocabulary, terminology and knowledge base for the student to pull from.

The input that children receive from birth influences their language development (Evans & Wachs 2010; Goldenberg, 2008; Hart & Risley, 2003; Vernon-Feagans et al., 2012; Winsler et al. 2014). Educators need to be intentional and explicit regarding the input that is provided to students. This regular input and modeling by adults in a school setting can have major impacts on literacy learning for years to come.

**Output.** While input is the taking in of information, output is the production of language or knowledge, often through speaking or writing. It is also referred to as expressive language. Krashen (2013) does not support the use of output or speaking because it is not believed that increasing output will lead to increased language acquisition; that the most benefit comes through input. Others share that input alone is not enough (Beckman-Anthony, 2008; Ellis, 2005; Swain & Lapkin, 1995). Ellis (2005) provides four SLA instructional principles that support the opportunity to produce language as seen in Table 2.

Table 2

*Ellis' Principles in Relation to Output*

| Principle Number | Description of Principle   |
|------------------|--|
| 7                | Successful instructed language learning also requires opportunities for output (p. 39).                                  |
| 8                | The opportunity to interact in the L2 is central to developing L2 proficiency (p. 39).                                   |
| 10               | In assessing learners' L2 proficiency, it is important to examine free as well as controlled production (p. 41).         |
| 11               | Learners need to engage collaboratively in talk about linguistic problems and try to agree on solutions to them (p. 42). |

*Note.* As cited in Ellis (2005). *Free* production refers to open-ended questions and discourse. *Controlled* production refers to yes/no or multiple choice type responses that are limited.

In response to Krashen's (2013) immense focus on input, Swain and Lapkin (1995) provide the output hypothesis. The output hypothesis in simplified terms "is

that even without implicit or explicit feedback provided from an interlocutor about the learners' output, learners may still, on occasion, notice a gap in their own knowledge when they encounter a problem in trying to produce the L2" (p. 373). Swain and Lapkin (2013) argue that the mental processes used to produce language (output) are different from those that are used to comprehend language (input). There is value and importance to comprehensible *input* (Krashen, 2013), but there is equal value to comprehensible *output* (Swain & Lapkin, 1995). Output is viewed as a *product* of acquisition, but also demonstrates a piece of the overall acquisition *process* (Izumi, 2003).

Beckman-Anthony (2008) identifies four key areas of focus for supporting output in the classroom:

1. Create a safe learning environment focused on literacy that allows many opportunities for students to explore language through input and output. Students need to experiment with language in a safe place.
2. Encourage collaborative conversations between teachers, students, and peers. Use open-ended questions to engage students in conversations that utilize higher order thinking skills.
3. Explicitly teach vocabulary and provide opportunities to use the vocabulary in a variety of contexts.
4. Encourage writing as a tool in the classroom and provide opportunities for adult and peer feedback.

5. Provide opportunities for students to read aloud. This may include sharing their own writing, choral reading, reader's theater, role-plays, or think alouds.

The key to all of this is to intentionally target output from students. Swain and Lapkin (1995) sum up the value of output when they state:

In speaking or writing, learners can 'stretch' their interlanguage to meet communicative goals. They might work towards solving their linguistic limitations by using their own internalized knowledge, or by cueing themselves to listen for a solution in future input. Learners (as well as native speakers, of course) can fake it, so to speak, in comprehension, but they cannot do so in the same way in production... To produce, learners need to do something; they need to create linguistic form and meaning and in so doing, discover what they can and cannot do. (p. 127)

***Context and meaning.*** One of the key issues encompassing both input and output is how language experiences are embedded within context and meaning to ensure that the students are learning the academic language necessary to comprehend the content in school. Mize and Dantas-Whitney (2007) state that learning language in context is intrinsically motivating to students and when subject matter such as grammar needs to be addressed, it should be woven purposefully into the content that is being covered.

Ellis (2005) expands on this with the principles presented and argues that learners should be focused on developing meaning. Implicit knowledge, such as the structure, mechanics, and the grammar of a language, as well as explicit knowledge,

which are connected to academic content areas such as math, science, and social studies, are important. Table 3 provides Ellis' (2005) principles related to context and meaning.

Table 3

*Ellis' Principles in Relation to Context*

| Principle Number | Description of Principle  |
|------------------|---|
| 2                | Instruction needs to ensure that learners focus predominantly on meaning (p. 34).   |
| 4                | Instruction needs to be predominantly directed at developing implicit knowledge of the L2, while not neglecting explicit knowledge (p. 35). |

*Note.* As cited in Ellis (2005). *Implicit* knowledge refers to the structure, mechanics and the grammar of a language. *Explicit* knowledge refers to academic content areas such as math, science, and social studies.

One curricular approach that has developed over the years is content-based instruction (CBI). This is a strategy that moves away from rote memorization and repeated practice, to a teacher facilitation and mediation of meaning and content through communication and dialogue. CBI is focused on learning the content first and developing language as a bi-product of that learning (Channa & Soomro, 2015), although many educators feel that any integration of language and content into instruction falls under the umbrella of CBI (Met, 1999). Critics of CBI share concern that if all the focus is on content and providing comprehensible input, there is a lack of skill development in grammar. Met (1999) refers to a balanced approach or adjunct model when he states that:

The adjunct model frequently demonstrates a mutual influence between content and language outcomes: neither one nor the other drives instructional decision-making independently of the other. Because both content and language are priorities, programs with a shared emphasis tie at the midpoint of the continuum. (p. 9)

Other research in the area of context has focused on explicit instruction through vocabulary development. Marulis and Neuman (2010) completed a meta-analysis on the effects of vocabulary interventions on young children's word learning. There were 64 articles that met the criteria for their study, which included 5,929 children in either a treatment or control group. Effect size was analyzed using Hedges *g* coefficient, a more conservative estimate than Cohen's *d* (Marulis & Neuman, 2010). The key finding in terms of context was that vocabulary interventions that utilized methods with explicit instruction, or deliberately explained words with key examples or in context, had a higher effect size than those that used implicit methods, such as discovering word meaning within a story. In addition, interventions that combined explicit and implicit instructional strategies, where students learned the meaning of words and then used them in meaningful tasks, showed an even higher effect.

Another study considers the impact of vocabulary, but with the additional influence of narrative development to build comprehension skills. Nielsen and Friesen (2012) conducted a study of 28 kindergarten students, meeting three times per week over the course of 12 weeks. The intervention focused on vocabulary and narrative

development based on support from previous research identifying a strong relationship between children's language ability when students begin school and reading comprehension later in their school career. The intervention included a vocabulary component where vocabulary words from a text were explicitly shared with students with a variety of strategies including: visual context through photos, actions and movement, use of real objects, separating words that had similar meanings, and grouping of words that were opposites for comparison. The narrative component of the study focused on the purpose of the text, utilized preplanned questions for discussion, story reenactment, and story retell over a course of three days.

The repeated measures analysis of vocabulary growth showed significant differences over time using pre, post and delayed post data on six of the seven sets of words, with intervention students demonstrating higher gains. There were not statistically significant differences between the intervention and comparison groups, although the intervention students did gain approximately twice as many points as the comparison group on one measure. One finding did identify gains and more complete story retells for the intervention group. Nielsen and Friesen (2012) speculate that these gains may be due to the explicit instruction on story retell with a structure that included modeling, guided practice, and independent practice for students.

These studies reinforce that there is a need for explicit instruction to further develop the language skills of students. A number of students are starting school with limited language skills and this is disproportionately high for students in poverty. Many researchers agree that rather than focus on input, output, or context in isolation,

teachers needs to be creative in how they structure lessons to address all three in relevant and meaningful ways (Ellis, 2005; Marulis & Neuman, 2010; Mize & Dantas-Whitney, 2008; Nielsen & Friesen, 2012).

***Individual needs.*** Although much of these strategies involve *what* students do in the classroom with their teacher, *who* they are as individuals cannot be overlooked. It is imperative that teachers work to understand the unique motivations, skills, and background that students bring to the classroom in order to appropriately address their individual needs. Ellis (2005) includes two principles in Table 4 that address the importance of considering students as individuals.

Table 4

*Ellis' Principles in Relation to Individual Student Needs*

| Principle Number | Description of Principle   |
|------------------|--|
| 9                | Instruction needs to take account of individual differences in learners (p. 40).                 |
| 12               | Instruction needs to take into account the subjective aspect to learning a new language (p. 42). |

*Note.* As cited in Ellis (2005).

In terms of what teachers should know, Almanza de Schonewise and Klingner (2012) identify four concepts in which educators should be knowledgeable when working with ELL students including: linguistic issues and the second language process; cultural issues and cultural-responsive pedagogy; assessment considerations (especially bias); and instruction that supports language and literacy development in the content areas (p. 51).



Educators need to view the cultural differences between students as opportunities and assets as opposed to barriers to learning. An understanding of this diversity is critical in determining the best means of instruction. All too often, students that are struggling face over-and under-representation in special education, especially if they are of color or ELL. By using cultural information in planning for instruction it can help distinguish students that are struggling due to language proficiency or a disability (Klingner, Artiles, & Barletta, 2006). Almanza de Schonewise and Klingner (2012) state:

Growing evidence suggests that ELLs benefit from teachers who understand and know how to meet their linguistic and cultural needs and provide them with meaningful access to core content. Instructional methods found to be effective for ELLs help them build their oral language skills while teaching content, build oral and written vocabulary knowledge, and teach them the reading comprehension strategies that can help them to be more active, engaged learners and better comprehenders. (p. 64)

These considerations are not just about race and language. Data show that females have advantages over males, which could be due to behaviors and socio-emotional skills more often associated with girls (Winsler et al., 2014). Students with higher social skills and low behavior concerns had better language skills. Students that had low levels of anxiety were more extroverted and willing to take risks, developed a second language (L2) at a higher level. Native language (L1) was also an important factor in developing L2 as it aids in comprehension as learners can pull meaning from

L1. Students with strong parental attachments had higher L2 skills and students with more educated parents had higher English oral proficiency. Higher L1 skills did lead to higher English skills after a year and meaningful exposure to L1 vocabulary and comprehension skills were associated with greater success in L2. These results support the use of L1 and developing students as bilinguals (Winsler et al., 2014).

Winsler et al. (2014) add another aspect of learning for ELL students by considering the impact of behavioral and social skills. Socio-emotional skills were shown to be especially important for children from impoverished backgrounds. Some students may fall behind in language and cognition, but show strength in socio-emotional development. Researchers recommend educators pay closer attention to shy ELLs that do not show initiative to further develop the traits of actively participating and risk taking to develop their L2 (Winsler et al., 2014). Teachers can support learning by building relationships and developing a deep awareness of individual needs and differences. This deeper understanding of students can better support any strategy or model that is utilized for instruction.

**Components of the Walk to Language Model.** The Walk to Language model is built on the foundation of an instructional model that has been associated with reading, called Walk to Reading. The Walk to Language model in this study is a hybrid model that encompasses the instructional strategies included in the previous section as well as elements of other language development models, and ability grouping.

***Language development models.*** When educators consider service models for language development, the focus tends to be on ELL students and rightly so, as this is a subgroup where the achievement gap has been prevalent for decades. There have been a number of models that have been utilized for language development for this group of students including pull-out, push-in, and bilingual programs.

Historically, pull-out models of instruction, where groups of students leave the class for instruction at a designated time each day, allow for groups that are developmentally and linguistically leveled. Pull-out models have been an efficient and cost effective strategy for addressing the language needs of students in many school districts (Adkins, 2009). There remains concern that students are missing content instruction while they are out of the room (Mize & Dantas-Whitney, 2007).

Push-in models include the sheltering and scaffolding of content for students to access academic language while remaining in the general education classroom. This model allows the content to drive the language needs of students in the classroom and provides ELL teachers the opportunity to learn the classroom context. Push-in models can be challenging to schedule and require resources, supports, and teachers that may not be available to the school (Mize & Dantas-Whitney, 2007).

Interest in bilingualism has increased over time as the clear advantages to being bilingual become prevalent (Winsler et al., 2014). Models that utilize a student's first language, such as immersion, dual language or bilingual models may reap the benefits of developing two languages. The development of reading skills in a child's home language influence English language abilities and are predictive of

English reading skills (Delbridge & Helman, 2016). In addition to supporting students in school, bilingual programs support students in becoming bilingual adults ready for the workforce. Delbridge and Helman (2016) state, “bilingual school programs are generally recognized as being the ideal environment for biliteracy development to occur, yet bilingual programs are few and far between in many states and most bilingual programs do not extend beyond the early elementary years” (p. 307). Bilingual models may be unrealistic in many school settings due to the cost, availability of bilingual teachers, and number of languages represented by ELL students in a school (Goldenberg, 2008). Others consider the model of language instruction within programs that utilize a student’s home language in terms of whether or not language instruction is more effective as a designated block of instruction versus it being integrated into English language arts instruction.

This matter has been studied by Saunders, Foorman, and Carlson (2006) in terms of the type of program (bilingual or immersion) and the method of instruction for English language development (designated block or integrated). In the study, 1,399 kindergarten students were assessed on oral language skills and literacy measures. All students were part of either an English immersion or a bilingual instructional program. Each type of program had classrooms to represent both the separate, dedicated blocks for language instruction model as well as the language integrated into ELA instruction model (Saunders et al., 2006).

The Saunders et al. (2006) study measured the amount of time focused on language development and reading as well as student growth and progress. Teachers

with an ELD block seemed to focus more time on English oral language and reading activities than those without a dedicated block of time. The designated block appeared to help teachers focus on specific outcomes related to oral language or reading as opposed to more blurred outcomes when an ELD block was not present. Not only was there more consistency with use of time within classrooms, but also across classes. Overall, the researchers observed teachers to be “more efficient and focused in their use of time” (p. 196).

When considering student outcomes, the students with an ELD block had significantly higher end of year scores on the oral language assessment than those with no-ELD block,  $F(1,1112) = 4.62, p < .05$ . Students with an ELD block had significantly higher end of year word identification scores,  $F(1, 1110) = 8.27, p < .01$  and those with an ELD block demonstrated slightly more growth on English letter sounds, but the difference was not significant (Saunders, Foorman, & Carlson, 2006). Overall, ELD block performed slightly better, but the effect size was low to modest, ranging from 13% to 27% (Saunders et al., 2006). These researchers also stress that the content of the ELD block is critical and the professional development needs of teachers must be considered in order to make the model effective (Saunders et al., 2006).

While there have been a number of language development opportunities for ELL students, there have been limited avenues for non-ELL students to receive explicit language instruction. Most interventions to address the needs of struggling readers have come through small group reading interventions. With the impact of

poverty, chaos and other barriers, reading intervention is not enough (Nielsen & Friesen, 2012). That is where the Walk to Language model is different. It is a model of language development for all students. In order to better understand the model, one should develop an understanding of the research around ability grouping, as it is a key aspect of the Walk to Language model.

***Ability grouping.*** The most well-known element of Vygotsky's theory is the Zone of Proximal Development (ZPD) and it comes into play as one considers the aspect of ability grouping for this study. The ZPD is defined as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 33). Within the ZPD, cognitive change can take place through interdependence in a social activity. Examples of working within a ZPD can be found in classroom interactions, apprenticeships, parent-child interactions, or play. The key is that there is an unequal expertise that is shared through interaction (Hausfather, 1996). Learning opportunities should be matched with the child's developmental level and should reflect what students can complete with some assistance (Vygotsky, 1978).

One strategy that has been utilized by schools to address the ZPD is ability grouping. Ability grouping is defined as "the practice of making student groupings based on ability and achievement in an attempt to provide instruction specifically relevant to each group's needs" (Davidson, 2009, p. 1). Ability grouping is an approach regularly used in schools, yet it has been a topic of debate in terms of its use

and benefit. There are various types of groups that are formed, including within-class and cross grade level regrouping models (Davidson, 2009).

*Within-class ability grouping.* Within-class groups are used in more than 60% of primary classrooms and are most often associated with reading or math (Davidson, 2009). Students are assigned to groupings based on the teacher's knowledge of the student. Some districts provide protocols and systems for assessing students and assigning groups for instruction. The benefits of within-class groupings include the teacher's ability to utilize various strategies and content instruction or practices that are tailored to the needs of the group of students. This differentiated approach provides students instruction in specific skills or repeated practice with feedback that may be needed to continue progress in the content area (Davidson, 2009).

Others believe that the negative effects of within-class ability groupings outweigh the positive impact. One area of concern is the psychological well-being of the student. Students are often aware of the level of the groupings and may become more cognizant of their own as well as their peers' achievement. This has the greatest impact on lower achieving students. Some teachers and districts work to mitigate this concern by moving students to various groups for different tasks or based on the progress that the student is making. There are also concerns that teachers may have lower expectations for the lower performing groups or that these groups may miss new content due to the repeated practice of concepts that others have mastered. The amount of time that students spend in groups in comparison to the amount of time they

are working on independent tasks or seatwork is of additional concern (Davidson, 2009).

Chozwempa and Graham (2006) conducted a teacher survey supporting these claims. In their survey of 222 public and private school teachers currently teaching first through third grade, researchers found that 63% utilized within-class ability grouping in the classrooms. In considering why teachers used these groupings, 68% reported that the model helps address the instructional and social needs of students. Other reasons cited were the compatibility of the groupings with the curriculum provided or mandates of the principal or district. The study found more variation in reasoning for teachers that did not ability group. One in five teachers reported that they believed the model had a negative impact on student self-esteem, while others believed heterogeneous groups (29%) or individual instruction (15%) led to better outcomes. One in six teachers reported that the groups were not compatible with their curriculum, and one in five reported that the principal or district had banned the practice. Still other teachers shared that the practice required too much work or time to prepare for the groups.

There is still work to do in terms of determining the circumstance in which ability grouping may be beneficial. The Early Childhood Longitudinal Study – Kindergarten Cohort (ECLS-K) data for the class of 1998-1999, which included 2,814 kindergarten classes from 990 schools, was utilized by Robinson (2008) to consider the potential benefits to Hispanic Language Minority students (referred to as ELL students in this paper) in kindergarten. The study evaluated the relationship between



teacher use of within-class ability groups and narrowing the achievement gap between White children and Hispanic ELL students while accounting for the ELL student's language spoken at home.

The data showed that 33.4% of the kindergartners in the study were placed in ability groups for reading, three or more times per week, with a higher percentage of ELLs (51%) participating in ability groups. It was found that public school kindergartners in ability groups experienced larger fall-to-spring gains than non-grouped peers using reading data collected in the ECLS-K assessments. For White students, ability grouped students gained 0.12 standard deviations for every month of kindergarten in comparison to their non-grouped peers. In looking specifically at ELLs, ability grouped students ( $M = 48.54$ ) outperformed non-grouped students ( $M = 45.02$ ) in the spring in mean scores ( $p < .01$ ), with fall scores showing no significant differences. Hispanic ELLs that were ability grouped gained 0.53 standard deviations more than their non-grouped peers, and in addition gained 0.12 standard deviations more than ability grouped White students (Robinson, 2008).

Data were considered at the end of summer after kindergarten and end of first grade to identify long-term trends. The benefits to ELLs faded over summer if the student was not ability grouped the following year in first grade. For students that were ability grouped over the 2-year period, kindergarten through first grade, ELLs that were grouped demonstrated mean growth of 51.4 points in comparison to their non-grouped ELL peers ( $M = 43.7$ ). In addition, the ability grouped ELLs made gains in closing the achievement gap with their White ability grouped peers. Robinson

(2008) concluded, “implementing frequent ability grouping for LM Hispanic (ELL) students could prove to be highly effective at a very low cost” (p. 173).

*Cross grade level or regrouping models.* Another variation of ability grouping is referred to as cross-grade grouping or regrouping models. For this model, the practice is to assign students to heterogeneous homeroom groups for the majority of their day and then regroup students during content instructional time according to their achievement level. When this strategy is used for reading, it is referred to as the “Joplin Plan”, but it can also take place for math instruction. The goal of regrouping is to reduce the number of instructional levels in one class to better allow the teacher to address the pacing and instructional needs of students (Slavin, 1987). Slavin completed a widely cited meta-analysis of literature to consider the effects of regrouping at the elementary level. The criteria for inclusion in this study was the requirement of a heterogeneously grouped control class, achievement data from standardized tests, initial comparability samples were to use random assignment or match students within equivalent classes, ability grouping needed to be in place for a minimum of one semester, and studies had to include at least three experimental and three control teachers. These criteria limited the research to 14 studies that were included.

The benefits of regrouping as described by Slavin (1987) were that it minimized the social stigma for within-class groupings because groups were based on the actual performance of students in math or reading, and that regrouped classes can remain fluid or flexible to adjust to the needs of students. In the analysis of the

regrouping studies, five out of seven resulted in positive effect sizes ranging from 0.05 to 0.43; the other two studies found a negative effect size.

Studies with positive effects stress the importance of adjusting the pace and materials for the needs of the group. Studies that involved the Joplin Plan or Joplin-like models for reading had more consistent, optimistic results. Eleven of the 14 studies using a Joplin-like model showed positive effect sizes, with the other three showing no effect. The median effect size for the 11 studies was approximately 0.45, with a range of 0.15 to 0.89. Overall, the studies on regrouping are inconclusive due to the variety of factors involved as well as a lack of updated research (Slavin, 1987).

One study on regrouping conducted by Borman, Slavin, Cheung, Chamberlain, Madden, and Chambers (2007) reported the outcomes of a three-year randomized experimental study of the Success For All model (SFA), funded by the U.S. Department of Education. The goal of this school reform model was to help all children achieve in reading, despite socioeconomic status or ethnicity. The schoolwide model was geared towards getting all students adequate reading skills by third grade. Kindergartners were a part of a full-day program that was focused on language and literacy development. First through fifth graders spent most of their day with their regular class but were ability grouped across grades for reading instruction at various levels. Lesson plans were provided to kindergarten and first grade teachers, which included research-based strategies for instruction. Second through fifth grade teachers used the school or district provided curriculum within a structured set of instructional strategies from SFA. Teachers used SFA's benchmark assessments to

formally monitor student performance each quarter and make group changes based on the results.

The study included a total of 41 schools and began in the fall of 2001. The sample of schools all had high levels of poverty and many were located in urban Midwest locations. The original kindergarten cohort was pretested with the Peabody Picture Vocabulary Test (PPVT III) in the fall of kindergarten and individually posttested with Woodcock reading Mastery Tests – Revised (WMTR) in the spring of the subsequent years. The final sample included cohort data for 1,085 kindergarten through second grade students in treatment schools and 1,023 students from control schools. Cohen’s  $d$  analysis indicates that the effect size for the Passage Comprehension sub test was  $d = 0.21$  with  $p < .05$  confidence and  $d = 0.33$  for Word Attack  $p < .01$ . Although the effect size of this study is modest, it was compared to other educational interventions such as Title I ( $d = 0.11$ ), Tennessee Student-Teacher Achievement Ratio ( $d = 0.11$  to  $d = 0.22$ ), or the 29 most widely utilized school reform models which ranged between  $d = 0.09$  and  $d = 0.15$ . This comparison shows that the effect size was actually higher than that found in many other school improvement reforms (Borman, Slavin, Cheung, Chamberlain, Madden, & Chambers, 2007).

One of the concerns for researchers in the 2000s was the impact of groupings on historically disadvantaged groups. Kalogrides and Loeb (2013) looked at race and ethnicity patterns with groupings in schools. The researchers evaluated longitudinal data from three large urban school districts with high levels of diversity and low SES.

The study considered whether the sorting of students was based on ethnicity, SES or prior academic achievement. Racial and ethnic segregation was found to be high in all three districts, although much of this was due to the inclusion of prior academic achievement as an additional variable. This accounted for most, but not all of the inequality. Principals may do some intentional groupings of Black or Hispanic students with Black or Hispanic teachers or peers to provide a support network. Students being placed into various groups related to their poverty status happened less often. In addition, it was determined that Black and Hispanic students are more likely to have a newer teacher with less experience in the classroom (Kalogrides & Loeb, 2013).

A study by Macqueen (2013) takes a deeper look into teacher preparation, experience and attitudes in regards to regrouping. Macqueen (2013) discussed the imprecision used by schools when the use of standardized tests, classroom assessments, anecdotal observations or a combination of all are evaluated to determine groups. One fear is that students will get stuck in a group, and disadvantaged students tend to have a higher level of representation in the lowest groups. This may influence peer interactions for low SES and/or minority students.

Macqueen (2013) did a study of two schools in Australia, one using the regrouping method; the other did not regroup for instruction. The research focus was on teacher perceptions. One key finding was the non-grouping teachers utilized a variety of strategies to differentiate for their students, but the grouping teachers were

less likely to see differentiation as necessary because of the homogenous grouping of students. This is of concern because:

Students at the upper or lower extremes of the academic range in each class, as well as those placed in the wrong group either unintentionally or for management reasons, are likely to be disadvantaged by the lack of differentiation provided in regrouped classes. (p. 304)

In addition to the lack of differentiation, grouping teachers shared difficulty in being able to integrate content into other areas. Some groups did integrate content and others did not. This left inconsistencies in what had been covered when students went back to their homerooms. Principals shared concerns over their perceptions of lower expectations for low groups and the need to incorporate higher order thinking opportunities into the classes (Macqueen, 2013). The lack of differentiation coupled with challenges with integrating content into regrouped classes may present inequities in the instruction and content that is provided in regrouped classrooms without intentional planning and collaboration.

Loveless (2013) evaluated a survey of fourth grade teachers conducted by NAEP regarding the frequency of ability grouping in today's school. Based on teacher report, the percentage of students placed into ability groups for reading instruction had a dramatic increase from 28% in 1998 to 71% in 2009. These data identified a "resurgence" of ability grouping in the 2000s after decreasing use in the 1990s. Loveless (2013) speculates that this may be due to the accountability systems of more recent years and the focus that has been placed on various subgroups meeting

a level of proficiency on state tests. The focus of research in that time period seems to have shifted as well. The research in the 1980s and 1990s was centered on academic achievement. In the 2000s, more of the focus has been concentrated on teacher perceptions, training and influences in addition to concern for disadvantaged youth and segregation.

### **Gap in the research**

The research on language development and ability grouping reflects mixed results. By putting these elements together in a Walk to Language model, there are no studies that have been identified that address the impact of this literacy rich opportunity on student language development and literacy skills. Each of the studies has a place in the field and offers insights and elements to consider, but each is unique and dependent on the circumstances and needs of students. None of the research is inclusive of all the various components present in the Walk to Language Model. This issue presents an opportunity to address a gap in the research with a model that attempts to use a synthesis of strategies in a format that addresses the needs of ELL and non-ELL students.

### **Summary**

This review provides theoretical and empirical literature related to the Walk to Language Model. The process for acquiring language and using mediation as a tool to create understanding is at the foundation of this work. Barriers to language development and learning in terms of familial chaos and English proficiency are addressed. Strategies for improving language are identified in terms of input, output,

context, and individual needs. Finally, components of the model are considered in relation to language development models and ability grouping.

Chapter Three will address the methodology for the study. It identifies the research questions and hypotheses, rationale, and specifics of the study. Information on the instrumentation, data analysis, and limitations are presented in detail.



### **Chapter 3: Methodology**

The following chapter discusses the methodology used to conduct this study, which investigated the Walk to Language model. The following sections provide an overview of the research questions and hypotheses, rationale for the methodology utilized, information on the setting and participants, specifics to the design and procedures involved, and the instruments that were utilized for data collection in the study.

#### **Research Questions and Hypotheses**

The purpose of this quantitative research study was to determine the impact of explicit language instruction in kindergarten for ELL and non-ELL students through the Walk to Language model on English language development as measured by English Language Proficiency Assessment for the 21<sup>st</sup> Century (ELPA21) and a district administered language screener as well as academic achievement in language arts as measured by Dynamic Indicator of Basic Early Literacy Skills (DIBELS) composite scores and sentence dictation samples.

For the purpose of the study, the following research questions were addressed:

1. How does the Walk to Language model impact progress in English language development as measured by growth from fall to spring for ELL and non-ELL kindergarten students?
2. How does the Walk to Language model impact progress in English language arts skills as measured by growth from fall to spring for ELL and non-ELL kindergarten students?

The hypotheses for this study include:

- It is anticipated that ELL and non-ELL students who participate in a Walk to Language model will demonstrate greater growth in language skills compared to ELL and non-ELL students that were not receiving explicit language instruction as measured by a district administered oral language screener (non-ELL); *preLAS* and ELPA 21 state assessment (ELL only).
- It is anticipated that ELL and non-ELL students who participate in a Walk to Language model will demonstrate further development of English language arts skills compared to ELL and non-ELL students that were not receiving explicit language instruction as measured by fall and spring DIBELS composite scores (ELL and non-ELL) and teacher administered sentence dictation samples (ELL and non-ELL).

### **Rationale for Methodology**

This study utilized a quantitative, ex post facto approach. Quantitative research has been defined by Ary, Cheser-Jacobs, and Sorensen (2006) as an “inquiry employing operational definitions to generate numeric data to answer predetermined hypothesis or questions” (p. 648). Quantitative analysis requires the researcher to be as objective as possible to determine cause and effect type relationships, describe a situation, and numerically test a hypothesis (Muijs, 2011). As this research strives to determine if the Walk to Language model led to increases in language and reading scores, quantitative measures allow for analysis between groups of students and

schools that were a part of the pilot or treatment groups as well as from comparison schools.

Experimental methods were ideal for testing a quantitative hypothesis due to the controlled environment, random assignment of participants, and limit to confounding variables, yet in a school setting that is rarely something that is practical or realistic. On the other hand, ex post facto designs allow for an intervention to take place in a natural school setting as a part of a school program with some of the same benefits as experimental research. This does leave potential for bias and less control over various factors but provides an opportunity for the work in real schools and actual classrooms to be evaluated (Muijs, 2011). Ex post facto research is “similar to an experiment, except the researcher does not manipulate the independent variable, which has already occurred in the natural course of events” (Ary, Cheser-Jacobs, & Sorensen, 2006, p. 26). Data collected by schools and districts are becoming a useful resource in the field. The researcher must consider that the data collected may have been for a different purpose and be prepared to acknowledge reliability issues that may be present (Muijs, 2011).

This study utilized institutional pre and post data collected during the 2015-2016 school year from a school participating in a pilot program and two comparison schools all within the same district. It represents work that was taking place at the time in schools to benefit the academic progress of students. Research in education does not tend to have the same clout as the natural sciences because it is harder to find precise predictions, presents challenges in generalizing to other settings, and tends to

be less objective (Ary et al., 2006). This can present some limitations and challenges, yet also provides credibility to educators in the field.

### **Context**

This study evolved from the increasing needs of a suburban school district in the northwestern United States to support ELL students. The district had transitioned through various language development models over the last 20 years and most recently had been utilizing a pull-out model of instruction, outside of the regular classroom, with specifically endorsed teachers (ELL teachers) providing language development services to elementary ELL students. Students in the traditional pull-out model received instruction in groups based on student English proficiency levels for 150 minutes per week. As the district strived to increase the growth of all students, it was becoming apparent that the achievement gap was not closing and that other strategies should be considered to better meet the needs of students. Of the nearly 12,000 students in the school district, 72.8% graduated in 2013-2014. This gap is evident when you consider the graduation rates of the economically disadvantaged (64.9%) or the ELL subgroups (56.4%) (Oregon Department of Education, 2015).

In the spring of 2015, elementary level ELL teachers and principals in the district were approached about an opportunity to voluntarily participate in a pilot program of a Walk to Language model in kindergarten beginning in the fall of 2015. The model would provide an opportunity to serve students in a broader context with native English speaking peers where classroom teachers would partner with ELL teachers to provide instruction. The goal of the model was to build greater cohesion

between classroom skill and content instruction in literacy and the English language support and instruction provided in ELL classrooms. In addition, the model would provide language instruction for non-ELL students that had not received explicit language instruction in the pull-out model.

Three schools volunteered to participate in the pilot project for the 2015-2016 school year. Classroom teachers were provided two days of professional development on Systematic English Language Development (Dutro, 2011) to provide background knowledge as well as common structures and routines that could be utilized during language instruction. The specific role of Systematic ELD as a resource will be described later in this chapter. The district ELL team developed weekly lesson plans aligned with the district's English language arts (ELA) curriculum and provided ongoing professional development, guidance and support for each school throughout the process. Sample lesson plans are available in Appendix A.

### **Participants**

Participants for the pilot of Walk to Language included approximately 100 kindergarten students. These students all attended a K-5 school with a student enrollment of 538 students. The school served a diverse population in which 26% of students were ELL and 17 languages were represented, with the largest subgroup being Hispanic at 30%. The mobility rate of the school was 18.9% and all students received free breakfast and lunch as a part of a federal program (Oregon Department of Education, 2015). Demographic data for the treatment school are presented in

Table 5. All kindergarten students participated in the model at the pilot school. The criteria used for individual student data to be a part of the evaluation included:

- Students should have fall and spring data available
- Students should have consistent attendance (90% or greater)
- Students were not receiving specially designed instruction as a part of an Individual Education Plan (IEP)

In order to successfully evaluate the effectiveness of the model, comparison schools within the district were identified. These schools were identified during the summer of 2016 based on the size, Title I status, and demographics of the school. Each of the elementary schools in the district designated as Title I (see Table 5) were considered to be comparison schools.

The school district funds Title I schools at varying levels based on need as determined by direct services provided to support families in poverty. Schools A, B, and C are funded by the district at the same level as the pilot school in the study and were therefore the schools considered for comparison. School A was eliminated for consideration as a comparison school due to a recent change in school leadership and significant turnover of staff. This school was also assigned a priority school status as designated by the state of Oregon for performance in the bottom five percent of all schools. This identification provided an improvement coach, mandates, and other confounding variables. Two schools, B and C, were identified as having demographics most similar to the pilot school based on state report card data and

district Title I funding level. In addition, these two schools have been identified by the state of Oregon as a “like-school” when comparing state test data.

Table 5

*Demographic Data for Title I Elementary Schools in District Considered as Comparison Schools*

|                            | Pilot School | Schools to be considered for comparison school in study |     |     |     |     |     |
|----------------------------|--------------|---|-----|-----|-----|-----|-----|
|                            |              | A   | B*  | C*  | D   | E   | F   |
| Student Enrollment         | 538          | 495   | 428 | 584 | 529 | 471 | 290 |
| SWD                        | 11%          | 14%   | 21% | 11% | 14% | 12% | 17% |
| ELL                        | 26%          | 25%   | 17% | 31% | 23% | 19% | 22% |
| Number of Languages Spoken | 17           | 10  | 13  | 9   | 12  | 11  | 9   |
| Regular Attenders          | 89%          | 86%   | 86% | 87% | 88% | 89% | 87% |
| Mobility                   | 19%          | 25%   | 19% | 14% | 16% | 15% | 17% |
| White                      | 49%          | 47%   | 57% | 57% | 60% | 65% | 63% |
| Hispanic                   | 30%          | 34%   | 26% | 33% | 24% | 25% | 22% |

*Note.* All Title I schools in district are designated as 100% free lunch. Students with disabilities (SWD); English Language Learners (ELL); Source: Oregon Department of Education (2014-2015).

\* School selected as comparison for this study.

## Design and Procedure

The overall model for Walk to Language involved identifying the language level of each student, both ELL and non-ELL, in order to place students in homogenous classes for language instruction. During the language block, students

went to various classrooms to receive explicit language instruction in which the content was aligned to the weekly literacy skills and content that was covered during the English language arts (ELA) block. Each week there were specific skills, content and language objectives to be reinforced, practiced and scaffolded for each language proficiency level during the language block, four days per week.

**Determining the language level of students.** Kindergarten students experience a variety of assessments throughout the year. All kindergarteners in the district were assessed four times per year, September, November, March, and May, on a variety of skills that identify readiness and progress in academic skills for beginning reading and writing through a district kindergarten screener. Various ELA components of this district assessment included letter and sound identification, phonemic awareness, reading of sight words, and sentence dictation. In addition, the district used Dynamic Indicators of Beginning Early Literacy Skills (DIBELS) as a schoolwide screener for reading three times per year. The first assessment was completed within the first three weeks of school, with subsequent screeners in January and May. At the start of the school year, any students that have a home language other than English, as listed on the registration materials completed by parents, were assessed using the Pre-Language Assessment Scales or *preLAS* to determine eligibility for ELL status. This oral language assessment for ELL students and the Express from Systematic ELD for non-ELL students were used to initially group students by language proficiency for instruction in the Walk to Language model.



Proficiency levels as defined by the state of Oregon include: beginning, early intermediate, intermediate, early advanced, and advanced; see Table 6 for examples.

Table 6

*English Language Proficiency Levels (Oral Language Example)*

| Proficiency        | Description of Level   |
|--------------------|--|
| Beginning          | Basic use of English with many errors; use gestures to help communicate basic needs; learn high frequency words/phrases with simple nouns, verbs and sentences; name objects. (apple; it is big; she is singing)   |
| Early Intermediate | Begin to use routine expressions independently; respond orally and in simple written expressions; learning vocabulary needed to complete thoughts.<br>(The lion roars. I saw a train. I added the numbers.)  |
| Intermediate       | Learning how to combine elements of language; able to express ideas, describe events and give information orally and in writing; vocabulary growth is high; include more detail. (I went to school yesterday. He studied hard and he got a good grade. The brown bear lived with his family in the forest.)                              |
| Early Advanced     | Begin to initiate and sustain language interactions, which help develop comprehension of complex oral and written content; consistent understanding of general and implied meaning. (After a few hours, the colt could stand up and the mare didn't have to help him.)   |
| Advanced           | Able to speak and write to perform social and academic tasks; expression and context is occasionally not appropriate and may require correction; mastery of language conventions. (Black bears prefer to scavenge for food; whereas grizzlies hunt for small animals. I wonder what time it is. You don't know what time it is, do you?) |

*Note.* Text source. Dutro, 2011.

Students that were in Walk to Language pilot schools as well as students in comparison schools were also assessed via a district created oral language assessment where students were prompted with open-ended questions to describe a picture in detail. The ELA and language assessments are described in further detail as a part of the instruments section of this chapter.

**Instructional staff.** The school represented in this study had four kindergarten teachers and two ELL teachers with varying backgrounds and experiences, see Table 7. During the language block provided 4 days per week, all four kindergarten teachers and one of the ELL teachers had a group of students for instruction, for a total of 5 groups ranging in size from 15 to 25 students. The lowest language proficiency students, many of whom were ELL, were instructed by an ELL teacher and were the smallest group. The other ELL teacher rotated between the kindergarten teachers' classrooms to provide support, model lessons, or co-teach to increase the capacity of classroom teachers in this new role. The ELL teachers switched roles (teaching and coaching) every six weeks. This allowed each ELL teacher to further develop their coaching skills as well as utilize the materials and lesson plans for their own instruction. Classroom teachers benefited from the expertise of two experienced ELL teachers for support and coaching.

Table 7

*Demographic Data for Pilot Teachers*

| Teacher | Gender | Teaching<br>(years) | Kindergarten<br>(years) | ELL<br>(years) | District<br>(years) | Education &<br>Endorsements |
|---------|--------|---------------------|-------------------------|----------------|---------------------|-----------------------------|
| A       | Female | 12                  | 7                       | 0              | 12                  | MA                          |
| B       | Female | 6                   | 1                       | 0              | 5                   | MA, SPED                    |
| C       | Female | 31                  | 11                      | 0              | 31                  | MA                          |
| D       | Female | 13                  | 7                       | 0              | 5                   | MA, Reading                 |
| ELL A   | Female | 15                  | 0                       | 9              | 10                  | MA, ESOL, Admin             |
| ELL B   | Female | 23                  | 0                       | 18             | 23                  | BA, ESOL, SPED              |

*Note.* MA refers to Master's Degree; BA refers to Bachelor's Degree; SPED refers to special education certification; Reading refers to a reading endorsement; ESOL refers to English for Speakers of Other Languages endorsement; Admin refers to an endorsement in K-12 school administration.

**Instructional Plan and Materials.** The school's master schedule provided a 30-minute instructional block within the school day, four days per week, for language instruction in kindergarten. For the first six-weeks of the school year, through mid-October, students remained with their classroom teacher for the language block. All groups utilized the Art of Getting Along unit from Systematic ELD for language instruction for the first weeks of instruction. This allowed kindergartener students time to bond with their class, learn routines, and begin language learning before regrouping classes with different teachers in the Walk to Language model. During this time, ELL teachers conducted language assessments for potential ELL identification and placement of all students. Group placements were fluid and students were moved to other proficiency levels as their skills progressed or in cases

where the group did not seem to be meeting the language needs of the student.

Language teachers discussed the progress of individual students during collaboration times and decisions were made as to the best placement for each child that posed a concern.

By mid-October, the instructional team finalized groups for the Walk to Language model by language proficiency level. Students began to receive language instruction aligned with the district's ELA curriculum, Houghton Mifflin Journeys, in their language groups. The emphasis of instruction was on oral language practice with applications to writing as were appropriate. Students were to practice language with each other through structured learning routines introduced to them during the Art of Getting Along unit. Instruction continued each week through June 2016.

All teachers were required to use lesson plan templates that were provided by the district ELL staff. The templates aligned goals and content from the ELA lessons that students were learning during their 90-minute literacy block and reinforced the language skills necessary to practice and further develop comprehension of the content. Materials were maintained in online folders available to the various schools and teachers in the pilot. Instruction was in alignment with the key strategies to improve language presented in Chapter 2 as presented in Table 8.

Table 8

*Strategies to Improve Language Within Walk to Language Model*

| Strategy            | Example from Lesson Planning   |
|---------------------|--|
| Input               | Use of literacy and language objectives to provide focused instruction on forms and functions. Specific forms and functions were practiced across classrooms each week. Use of pictures, songs, chants, and movement to support instructional goals and make the input comprehensible to students. Students received multiple opportunities for input to support language learning through ELA instruction and small groups during literacy block and intervention block, which occur in addition to the Walk to Language block. |
| Output              | Use of sentence frames to structure appropriate oral and/or written responses from students. Use of structured oral language response strategies that allow all students to have multiple opportunities to respond orally each day.  |
| Context and meaning | Content of each week for language practice was connected to the content presented in the literacy block. This allowed for multiple exposures to the content including thematic ties and new vocabulary. Use of language support materials from literacy adoption to supplement language instruction and connect the content and vocabulary lessons from literacy instruction to the Walk to Language block   |
| Individual needs    | Students were placed in groups based on individual language needs. Students were moved to a different group based on individual progress and needs. Students that struggled with transitions or relationships with new adults left with their classroom teacher rather than moved to another group.  |

*Note.* Descriptions of each strategy can be found in Chapter 2. Further examples of lesson plan templates are available in Appendix A.

**Professional development.** This pilot presented a major shift for kindergarten teachers, and in order to support this transition, a number of professional development and support opportunities were provided. Prior to the school year, kindergarten teachers were provided two full days of Systematic ELD training, a model used by ELL teachers in the pilot district (Dutro, 2011), to become familiar with language objectives, instruction, and routines that were utilized during the pilot. The training in this curriculum did provide common language in terms of forms (grammar, parts of speech, verb tense) and functions (tasks and use of language such as cause and effect, prediction, or inference) of language as well as oral language routines that were utilized in classrooms to build continuity and common practice. One unit of Systematic ELD, *The Art of Getting Along*, was used in the first six weeks of the year. Systematic ELD is a highly structured curriculum, much of which does not philosophically align with researchers such as Stephen Krashen (2006, 2011, 2013, 2014, 2016) or the model created in this pilot. Therefore, it provided common language and structure for teachers and oral language practice but was not used as a curricular resource from week to week.

In addition, ELL teachers and kindergarten teachers were provided release time on three different days throughout the year for planning and collaboration. The school team was provided 45 to 60 minutes per month of dedicated collaboration time in the school professional development calendar to address ongoing planning needs. Throughout the process, the ELL director and two ELL teachers on special assignment (TOSAs) were available for ongoing support, mentoring and coaching. Kindergarten

teachers had peer mentoring, modeling and co-teaching opportunities in the classroom all year from their ELL peers and a district ELL TOSA.

**Timeline.** Table 9 provides a calendar of events from the 2015-2016 pilot of the model.

Table 9

*Timeline for Pilot*

| Date                             | Professional Development  |
|----------------------------------|---|
| May 2015                         | ELL teacher and principals introduced to concept of Walk to Language and the opportunity to pilot the model by ELL director   |
| May 2015                         | Principal shared the opportunity of pilot to kindergarten teachers to gauge interest in participating in the model. Principal discussed opportunity with ELL teachers to gauge interest. Team showed interest in participating. |
| April 2015                       | Systematic ELD training – day 1 for all kindergarten teachers (ELL teachers and principal had already been trained).  |
| August 2015                      | Two half-days of Systematic ELD training for kindergarten teachers. Lesson plan templates shared and teachers received the Art of Getting Along kit for the first 6 weeks of instruction.                                       |
| September & October 2015         | Classroom teachers use Art of Getting Along kit to introduce language routines and build readiness for students.  |
| October 2015; January/April 2016 | Half day work session with school team and district ELL staff to debrief progress, plan for instruction.  |
| October 2015-June 2016           | Walk to Language model utilized for language instruction; Monthly school team planning sessions provided during building professional development time (45-60 minutes per month).   |
| December 2015                    | Kindergarten Walk to Language survey – principals, kindergarten teachers and ELL teachers.  |
| January 2016                     | Principal check in with ELL director.   |
| March 2016                       | Principal check in with ELL TOSA.   |
| April 2016                       | Principal check in with ELL director – plans for following year.  |
| April & May, 2016                | Teachers and principals from other schools considering the model visit classrooms.  |
| June 2016                        | Kindergarten Walk to Language survey – principals, kindergarten teachers and ELL teachers.  |



## **Instruments**

This study included various data gathering instruments that were administered by school district staff as a part of the pilot. The measurements utilized in the evaluation of this model included Dynamic Indicators of Basic Early Literacy Skills (DIBELS) Next, teacher administered dictation samples, an oral language screener, and the English Language Proficiency Assessment 21 (ELPA 21). The goal was to use a variety of measurements to create a clear picture of the progress of students in the Walk to Language model. Any one of these assessments on its own would lack the ability to provide a well-rounded, evidence-based analysis (Ary et al., 2006). Combining components of reading, writing, oral language, and English language development, provided multiple measures to consider in terms of the effectiveness of the model. Sample assessments, protocols and rubrics are included in Appendix A.

**DIBELS Next.** One assessment that was used in this study is the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) Next. Some estimate that as many as one in six public schools in the United States use DIBELS or the updated version DIBELS Next as an assessment of reading in kindergarten through third grade (Cummings, Park, & Bauer-Schaper, 2012 as cited in Smolkowski & Cummings, 2014). The assessment measures various literacy skills for students in kindergarten through sixth grade. A composite score was calculated based on scores from a number of skill assessments. For kindergarten, the skills assessed included: first sound fluency (FSF), phoneme segmentation fluency (PSF), and nonsense word fluency-correct letter sounds (NWF-CLS). Each assessment took approximately one minute for a total of

three minutes of assessment for each child (CTL, 2016).

Proponents of DIBELS see it as a means to quickly assess children in order to identify students that may be at risk of needing reading intervention to meet grade level expectations as well as predict future performance (CTL, 2016). DIBELS has been widely used by Reading First schools in Oregon as a means of monitoring the progress of students (Smolkowski & Cummings, 2014), which led to much of its popularity among schools. Developers of the assessment were clear in stating that DIBELS is not an exhaustive assessment and should be used with other tools and measures to determine the instructional needs of students (Young-Echols, 2010) as it is in this study.

Critics argue that DIBELS is not accurate in determining diagnostic information in terms of reading and may produce inaccurate results. Evidence suggests that the assessment may be better at identifying adequate reading skills than a lack of skills or determining risk (Nelson, 2008). Some studies look at DIBELS oral reading fluency (DORF) as a measure and have identified correlations between DORF and other assessments. Less work seems to have been done with some of the pre-reading skills, before a child is a fluent reader, and the information that the assessment provides to educators (Young-Echols, 2010).

For the purpose of this study, DIBELS data were gathered in the fall, winter, and spring as part of the school district's regular assessment schedule. The data were determined appropriate for this study because they were not used for placement or diagnostic purposes. Instead the data were used to monitor growth and progress of

students in the study as an indicator of development of reading skills. DIBELS is a well-established literacy assessment that is used in many places by practitioners across the country.

**Sentence dictation.** As a part of the district's assessment of English language arts, a sentence dictation assessment was completed three times per year. The assessment included one sentence that was completed as a part of the district kindergarten booklet in November, March and May. Teachers were provided a script explaining the procedure to students with the following steps:

1. Students are asked to try to write a sentence. Teacher reads the sentence.
2. Students are asked to repeat the sentence.
3. Teacher reads the sentence again one word at a time without artificially stretching out the pronunciation of each word.
4. Teacher prompts student to write any letters that they know for the sounds that they hear in the word. (School District, 2015)

Each sentence was scored based on the number of phonemes, correct words, capitalization, and punctuation for a single combined score. Common guidelines for each sentence dictation have been established to determine proficiency levels based on the number of total points for *meeting the standard* (M); *progressing toward the standard* (P) or *not making expected progress toward the standard* (N).

Sentence dictation is viewed as an important indicator of proficiency for early writers and encompasses a wide range of abilities that become evident in the assessment (Lembke, Deno, & Hall, 2003). Parama (2006) conducted a study with

first grade students on a variety of written assessments to determine what had the most potential to inform educators on the general writing ability of beginning writers.

Sentence dictation had the highest correlation with three criterion variables and supported the statement of Lembke, Deno, and Hall (2003) that sentence dictation and sentence copying are reliable “indicators of early writing proficiency when considering their potential for discriminating performance within and between individuals” (p. 33). Parama (2006) cautioned that the developmental appropriateness of sentence dictation for all students should be considered as a part of the process.

**Language screener.** To measure the language level of students, a non-published oral language screener was developed by educators from the school district in the study for pre and post data. The district level ELL team used personal expertise in language development and experience with ELL assessments to create a protocol and rubric for the oral language assessment. The protocol includes the following prompts (see Appendix B):

1. Here’s a picture of a playground and students playing at recess. I’m going to ask you some questions. Can you point to someone you want to tell me about?
2. Great, can you answer in complete sentences and tell me as many details as you can?
3. What is he/she wearing? What does he/she look like? Can you tell me what he/she is doing?
4. Is there anything else you want to tell me about him/her? Can you tell me about someone else?

Agreements were established to go back and repeat the three questions above and allow students to tell about up to three people. Each student was scored on a scale of 1 to 4 (far below, below, meets, exceeds) on ability to address the purpose of the picture, sentence structure, specific grammar, and descriptive language. The highest score possible was 16, and the lowest was 4. The team completed five side-by-side student assessments to calibrate procedures and scoring to create inter-rater reliability. The ELL director and a teacher on special assignment (TOSA) for the district administered these assessments at the treatment and control schools. Each assessment was audio recorded so that if questions on scoring arose, they could be addressed. Time constraints limited administration of this assessment to all kindergarten students. At the treatment school, 21 students have pre and post data. The comparison schools have pre and post data for a total of 17 students. There were plans to reassess these students again as first graders in the fall.

**ELPA 21.** The English Language Proficiency Assessment 21 (ELPA 21) was designated by the state as the instrument used to monitor the language development of ELL students from year to year. ELPA 21 was utilized for the 2015-2016 school year and reflects new language standards aligned with the Common Core State Standards (CCSS) and was being used in 10 states across the nation. This assessment used computer-based as well as written tasks to measure the English language proficiency of students within the academic content areas of English language arts, math, and science. The assessment covered the four language domains of reading, writing, listening, and speaking (ELPA 21, 2016).

All ELL students were required to participate in the assessment and scores were made available in the fall of 2016. ELPA 21 was a new assessment for schools in the 2015-2016 school year, so there was some uncertainty as to how the results would align with other assessments. ELL staff at the school administered the assessment to all kindergarten ELL students during the designated testing window and in accordance with the procedures outlined in the test administration manual.

### **Ethical Considerations**

The researcher received permission from the school district involved in this project as well as approval from the Institutional Review Board (IRB) to conduct this research study on the effectiveness of the Walk to Language model. The purpose of the IRB was to consider any potential harm to the subjects in the study. The nature of this study included data already collected from a school district, as a part of a pilot program that was offered in three schools. Therefore, the main consideration of harm was the confidentiality of students represented in the data.

### **Data Analysis**

The purpose of this quantitative research study was to determine the impact of explicit language instruction in kindergarten for ELL and non-ELL students through the Walk to Language model on English language development and English language arts. General descriptive statistics were generated for each school. Chi-square analyses were utilized to consider any potential differences in gender, ELL status, and ethnicity between the treatment and control groups. An analysis of variance (ANOVA) was performed to determine if the treatment and control groups were

comparable at the time of fall assessments. Finally, a series of analyses of covariance (ANCOVA) were conducted to compare means, determine growth, and compare groups for each assessment and various subgroups. Statistical significance was evaluated with criteria of  $p < .05$ . Comparisons were made with each of the data sets in the study including DIBELS, sentence dictation, language screener, and ELPA 21.

Data were gathered and stored in excel spreadsheets and stored under password in Dropbox. Student names remained confidential and data were sorted by identification number in Excel and SPSS. Data have been entered by a number of assessors, and 24% of the sentence dictation data entries in the treatment school and 11% in the control group were double checked by the researcher. Each group had an error rate of 7% for a total of 9 scores that were corrected in the data set. SPSS was the primary tool used for data analysis.

### **Summary**

The purpose of this quantitative research study was to determine the impact of explicit language instruction in kindergarten for ELL and non-ELL students through the Walk to Language model on English language development as measured by English Language Proficiency Assessment for the 21<sup>st</sup> Century (ELPA21) and a district administered language screener as well as academic achievement in English language arts as measured by Dynamic Indicator of Basic Early Literacy Skills (DIBELS) composite scores and sentence dictation samples.

An ex post facto quantitative research model was used to determine the impact of the pilot program. Kindergarten students from a suburban school district in the

northwest were assessed on multiple reading, writing and language indicators throughout the school year to provide comparison data with other schools in the district that were not participating in the model. Data were evaluated with Chi-square, ANOVA, and ANCOVA analyses to determine the effectiveness and statistical significance of the findings.



## **Chapter 4: Results of Data Analysis**

The purpose of this research study was to determine the impact of explicit language instruction in kindergarten for ELL and non-ELL students through the Walk to Language model on measures of English language development and academic achievement in English language arts. The institutional data from a Northwest school district provided an opportunity for data comparison of treatment and control schools as kindergarten students were assessed on multiple reading, writing, and language indicators throughout the school year. The research questions were investigated through an ex post facto quantitative research model to determine the impact of the pilot program. This chapter will review the research questions and hypotheses for the study, as well as present the results of data analysis pertinent to each of the research questions.

### **Analysis of Treatment and Control Groups**

The institutional data gathered for this study were collected from one treatment school and two control schools in the district. All kindergarten students in each school were considered for the study and data were eliminated under three criteria: if fall and spring data were not available in any of the assessments; if the student did not have consistent attendance (rate of less than 90%); or if the student received specially designed instruction as a part of an Individual Education Plan (IEP). In the control group, a total of 96 participants had viable data based on the criteria from the original data set of 174 (55%). The treatment group included 67 of the original 102

participants (66%) based on study conditions. Table 10 presents the number of cases eliminated from the study based on the parameters described above.

Table 10

*Data Eliminated From Treatment and Control Schools*

| Reason                                   | Treatment | Control 1 | Control 2 |
|--|-----------|-----------|-----------|
| Student on IEP                           | 9         | 6         | 2         |
| Attendance < 90%                         | 13        | 21        | 6         |
| IEP & Attendance <90%                    | 1         | 1         | 0         |
| Missing Dictation Data                   | 13        | 15        | 28        |
| Missing Dictation Data & Attendance <90% | 1         | 0         | 0         |
| Percentage Eliminated                    | 34%       | 47%       | 43%       |
| Total Remaining in Study                 | 67        | 48        | 48        |

*Note.* Original database included all students from each school that had fall, winter, and spring data for DIBELS. Students with any missing data points were eliminated from the study.

When evaluating the impact of a model for instruction, it is important to consider whether each school included in the study had similar data at the fall assessment. Therefore, an analysis of variance (ANOVA) was completed with the scores for each of the fall assessments (DIBELS Composite, Sentence Dictation, Language Screener, and Pre LAS). Varying language assessments were conducted from fall to spring based on a student's home language survey and determination of eligibility for ELL services; language screener for non-ELLs and PreLAS for ELLs. All students were assessed in the same English language arts measures. Table 11

displays the mean scores and standard deviations of each fall assessment for the treatment and each of the two control schools. Tukey post hoc tests revealed that there were no significant differences in fall scores for the DIBELS Next Composite and the Language Screener assessments between schools. A significant difference in fall scores for the Sentence Dictation was found, with the treatment school starting the year with higher scores  $F(2,161) = 9.25, p = 0.001$ , than each of the control schools. The differences between groups on the PreLAS were also found to be significant with higher scores in each of the control schools  $F(2,161) = 4.66, p = 0.014$  than the treatment school, but not significant differences between the control groups. It is important to note that there were no assessments with significant differences between control schools; therefore, the two control schools were combined into one control group as further analysis took place in this chapter.

Table 11

*Comparison of Control and Treatment Schools at Fall Assessment*

| School    | <i>n</i> | Fall Assessments    |                       |                      |               |
|-----------|----------|---------------------|-----------------------|----------------------|---------------|
|           |          | DIBELS<br>Composite | Sentence<br>Dictation | Language<br>Screener | Pre LAS       |
|           |          | <i>M (SD)</i>       | <i>M (SD)</i>         | <i>M (SD)</i>        | <i>M (SD)</i> |
| Treatment | 67       | 22.67 (3.02)        | 11.24* (5.45)         | 8.05 (3.00)          | 1.45* (0.94)  |
| Control 1 | 48       | 23.71 (3.06)        | 7.06 (5.11)           | 10.20 (1.92)         | 2.00 (1.29)   |
| Control 2 | 48       | 28.58 (3.54)        | 8.69 (5.08)           | 9.86 (1.06)          | 2.8 (1.23)    |

*Note.* \* $p < .05$ . For language screener treatment  $n = 21$ , control 1  $n = 5$ , control 2  $n = 7$ . For the PreLAS treatment  $n = 20$ , control 1  $n = 19$ , control 2  $n = 10$ .

Other descriptive data of the treatment and control groups were necessary for analysis of the model. Table 12 provides data for the control and treatment schools in terms of gender, ELL status, and ethnicity. Chi-square analyses revealed that none of these demographic data differed significantly between the control and treatment groups.

Table 12

*Descriptive Data for Treatment and Control Groups*

|                 | Control <i>n</i> = 96 |            | Treatment <i>n</i> = 67 |            |
|-----------------|-----------------------|------------|-------------------------|------------|
|                 | Frequency             | Percentage | Frequency               | Percentage |
| Gender          |                       |            |                         |            |
| Female          | 62                    | 65%        | 37                      | 55%        |
| Male            | 34                    | 35%        | 30                      | 44%        |
| ELL             |                       |            |                         |            |
| Identified      | 24                    | 25%        | 18                      | 27%        |
| Ethnicity       |                       |            |                         |            |
| American Indian | 3                     | 3%         | 1                       | 1%         |
| Asian           | 1                     | 1%         | 3                       | 4%         |
| Black           | 1                     | 1%         | 5                       | 7%         |
| Hispanic        | 32                    | 32%        | 20                      | 30%        |
| Two or more     | 4                     | 4%         | 5                       | 7%         |
| White           | 55                    | 55%        | 31                      | 46%        |

**Impact on English Language Development**

The first research question sought to determine how the Walk to Language model impacted progress in English language development as measured by growth from fall to spring for ELL and non-ELL kindergarten students. It was anticipated that ELL and non-ELL students who participated in a Walk to Language model would

demonstrate greater growth in language skills compared to ELL and non-ELL students that were not receiving explicit language instruction. Non-ELL students were assessed using a district administered oral language screener in the fall and spring; ELL students were measured using the *PreLAS* as fall data and the ELPA 21 state assessment as spring data.

The data in Table 13 presents the means and standard deviations from the language screener for students in the treatment and control groups for fall and spring scores. An analysis of covariance (ANCOVA) was conducted to examine the growth of each group based on the model. There was a statistically significant difference in growth after controlling for the fall assessment,  $F = 4.72, p = .04$ , with the treatment group outperforming the control group.

Further analysis was necessary to determine how various subgroups of students were impacted by the Walk to Language model. Several two-way analyses of covariance (ANCOVA) were conducted to examine the effects of the model based on gender and ethnicity while controlling for fall score. Table 13 provides results from the ANCOVA analysis for each subgroup. There was not a statistically significant effect on the language screener based on gender ( $p > 0.05$ ) or for ethnicity ( $p > 0.05$ ), but all treatment groups had higher mean growth scores than the control group.

Table 13

*Fall and Spring Score Analysis of Language Screener for Non-ELL Students*

| Subgroups   | Control                       |                               | Treatment                    |                               | Growth From Fall to Spring   |                              |
|---|-------------------------------|-------------------------------|------------------------------|-------------------------------|------------------------------|------------------------------|
|   | Fall<br><i>M (SD)</i>         | Spring<br><i>M (SD)</i>       | Fall<br><i>M (SD)</i>        | Spring<br><i>M (SD)</i>       | Control<br><i>M (SD)</i>     | Treatment<br><i>M (SD)</i>   |
| All   | 10.30 (1.86)<br><i>n</i> = 17 | 10.88 (1.93)<br><i>n</i> = 17 | 8.05 (3.01)<br><i>n</i> = 21 | 11.00 (1.67)<br><i>n</i> = 21 | 0.59 (1.06)<br><i>n</i> = 17 | 2.95 (2.52)<br><i>n</i> = 21 |
| Gender  |                               |                               |                              |                               |                              |                              |
| Female  | 10.30 (1.16)<br><i>n</i> = 10 | 10.80 (1.48)<br><i>n</i> = 10 | 8.42 (2.47)<br><i>n</i> = 12 | 10.83 (1.80)<br><i>n</i> = 12 | 0.50 (1.08)<br><i>n</i> = 10 | 2.42 (1.56)<br><i>n</i> = 12 |
| Male  | 8.50 (2.12)<br><i>n</i> = 2   | 9.00 (1.41)<br><i>n</i> = 2   | 7.56 (3.71)<br><i>n</i> = 9  | 11.22 (1.56)<br><i>n</i> = 9  | 0.50 (0.71)<br><i>n</i> = 2  | 3.67 (3.39)<br><i>n</i> = 9  |
| Ethnicity   |                               |                               |                              |                               |                              |                              |
| White   | 9.57 (1.62)<br><i>n</i> = 7   | 10.14 (1.90)<br><i>n</i> = 7  | 8.89 (2.03)<br><i>n</i> = 9  | 11.33 (1.66)<br><i>n</i> = 9  | 0.57 (1.27)<br><i>n</i> = 7  | 2.44 (1.59)<br><i>n</i> = 9  |
| OfColor   | 10.60 (0.89)<br><i>n</i> = 5  | 11.00 (1.00)<br><i>n</i> = 5  | 7.42 (3.53)<br><i>n</i> = 12 | 10.75 (1.71)<br><i>n</i> = 12 | 0.40 (0.55)<br><i>n</i> = 5  | 3.33 (3.06)<br><i>n</i> = 12 |
| <i>Note.</i> Language Screener assessed students that were not eligible for ELL services. |                               |                               |                              |                               |                              |                              |
|   |                               |                               |                              |                               | <i>F</i>                     | <i>p</i>                     |
|   |                               |                               |                              |                               | 4.72                         | 0.04                         |
|   |                               |                               |                              |                               | 0.13                         | 0.72                         |
|   |                               |                               |                              |                               |                              |                              |
|   |                               |                               |                              |                               | 0.18                         | 0.68                         |

Similar analyses were conducted for ELL students using ELPA 21 state assessment data. PreLAS was the fall measure for ELL students and does not align with ELPA 21 for growth analysis. Table 14 provides the mean scores and standard deviations from the ELPA 21 (spring assessment) for ELL students in the treatment and control groups. An analysis of covariance was conducted to examine the growth of each group based on the model. Overall, mean scores for the control group were higher in all areas of reading and speaking, and there was a statistically significant difference in the ELPA 21 reading scores  $F(1,35) = 4.55, p = .04$  and reading level  $F(1,35) = 6.38, p = .02$ .

In evaluation of the writing subtest, there were no significant differences, although the treatment group had a higher mean score overall (treatment 516.33, control 513.96), for males (treatment 546.60, control 488.00), and for students of color (treatment 515.85, control 501.75). Overall, females outperformed males based on mean scores for all subtests (reading, writing, listening, and speaking) in the control group. The opposite was true for the treatment group, where males outperformed females in all subtests, except speaking. Neither of the differences based on gender were significant.



Table 14

*Spring ELPA 21 Score Analysis for ELL Students*

| Descriptor                    | Control<br><i>M</i> ( <i>SD</i> ) | Treatment<br><i>M</i> ( <i>SD</i> ) | <i>F</i> | <i>p</i> |
|-------------------------------|-----------------------------------|-------------------------------------|----------|----------|
| ELPA 21 (Overall Proficiency) | 2.00 (0.30)<br><i>n</i> = 23      | 1.87 (0.35)<br><i>n</i> = 15        | 0.18     | 0.67     |
| ELPA 21 Reading Subtest       |                                   |                                     |          |          |
| Reading Score                 | 572.00 (47.79)<br><i>n</i> = 23   | 520.73 (55.86)<br><i>n</i> = 15     | 4.55     | 0.04     |
| Reading Level                 | 3.48 (0.90)<br><i>n</i> = 15      | 2.53 (0.83)<br><i>n</i> = 15        | 6.38     | 0.02     |
| Gender                        |                                   |                                     | 0.02     | 0.90     |
| Female                        | 581.40 (49.84)<br><i>n</i> = 15   | 510.50 (63.56)<br><i>n</i> = 10     |          |          |
| Male                          | 555.20 (56.21)<br><i>n</i> = 10   | 541.20 (32.34)<br><i>n</i> = 5      |          |          |
| Students of Color             | 566.45 (43.68)<br><i>n</i> = 20   | 529.23 (51.43)<br><i>n</i> = 13     | 0.73     | 0.40     |
| ELPA 21 Writing Subtest       |                                   |                                     |          |          |
| Writing Score                 | 513.96 (62.20)<br><i>n</i> = 23   | 516.33 (56.33)<br><i>n</i> = 15     | 1.04     | 0.31     |
| Writing Level                 | 1.83 (0.94)<br><i>n</i> = 23      | 1.73 (0.80)<br><i>n</i> = 15        | 0.38     | 0.54     |
| Gender                        |                                   |                                     | 0.01     | 0.94     |
| Female                        | 536.60 (70.12)<br><i>n</i> = 15   | 501.20 (58.32)<br><i>n</i> = 10     |          |          |
| Male                          | 488.00 (47.36)<br><i>n</i> = 10   | 546.60 (50.98)<br><i>n</i> = 5      |          |          |
| Students of Color             | 501.75 (47.49)<br><i>n</i> = 20   | 515.85 (56.11)<br><i>n</i> = 13     | 2.39     | 0.14     |

| Descriptor                | Control<br><i>M (SD)</i>        | Treatment<br><i>M (SD)</i>      | <i>F</i> | <i>p</i> |
|---------------------------|---------------------------------|---------------------------------|----------|----------|
| ELPA 21 Listening Subtest |                                 |                                 |          |          |
| Listening Score           | 568.87 (47.47)<br><i>n</i> = 23 | 530.33 (51.18)<br><i>n</i> = 15 | 2.33     | 0.14     |
| Listening Level           | 3.22 (0.74)<br><i>n</i> = 23    | 2.60 (0.74)<br><i>n</i> = 15    | 3.50     | 0.07     |
| Gender                    |                                 |                                 | 0.10     | 0.75     |
| Female                    | 581.33 (46.27)<br><i>n</i> = 15 | 522.20 (56.31)<br><i>n</i> = 10 |          |          |
| Male                      | 545.60 (59.73)<br><i>n</i> = 10 | 546.60 (39.23)<br><i>n</i> = 5  |          |          |
| Students of Color         | 565.05 (42.81)<br><i>n</i> = 20 | 536.77 (45.71)<br><i>n</i> = 13 | 0.63     | 0.43     |
| ELPA 21 Speaking Subtest  |                                 |                                 |          |          |
| Speaking Score            | 576.96 (54.01)<br><i>n</i> = 23 | 536.67 (49.14)<br><i>n</i> = 15 | 1.63     | 0.21     |
| Speaking Level            | 3.22 (1.00)<br><i>n</i> = 23    | 2.47 (0.83)<br><i>n</i> = 15    | 1.84     | 0.18     |
| Gender                    |                                 |                                 | 0.61     | 0.44     |
| Female                    | 583.73 (48.93)<br><i>n</i> = 15 | 537.70 (45.30)<br><i>n</i> = 10 |          |          |
| Male                      | 557.20 (69.49)<br><i>n</i> = 10 | 534.60 (61.87)<br><i>n</i> = 5  |          |          |
| Students of Color         | 569.75 (52.57)<br><i>n</i> = 20 | 536.92 (50.76)<br><i>n</i> = 13 | 0.09     | 0.77     |

*Note.* ELPA 21 has multiple sub scores and levels for reading, writing, listening, and speaking.

### **Impact on English Language Arts**

The second research question investigated how the Walk to Language model impacted progress in English language arts (ELA) skills as measured by growth from fall to spring for ELL and non-ELL kindergarten students. It was anticipated that ELL and non-ELL students who participated in a Walk to Language model would demonstrate greater growth in English language arts skills compared to ELL and non-ELL students that were not receiving explicit language instruction. Growth was measured using fall and spring DIBELS Next Composite scores (ELL and non-ELL) and teacher administered sentence dictation samples (ELL and non-ELL).

The data in Table 15 presents the means and standard deviations from the DIBELS Next Composite and Sentence Dictation assessments for students in the treatment and control groups coupled with analyses of covariance (ANCOVA) to examine the growth of each group. For the DIBELS Next Composite, fall treatment mean scores started lower than the control, although not significant, and spring mean scores for the treatment group were higher and marginal ( $p = .082$ ). The change in sentence dictation scores were significant ( $p = .001$ ) for the students in the control group, although this group had fall assessment scores significantly lower than the treatment group as shared in previous sections of this chapter.

Table 15

*Fall and Spring Score Analysis for English Language Arts*

| Assessment         | Fall Scores      |                  | Spring Scores     |                   | Change from Fall to Spring |                    |          |          |
|--------------------|------------------|------------------|-------------------|-------------------|----------------------------|--------------------|----------|----------|
|                    | Control          | Trtmt            | Control           | Trtmt             | Control                    | Trtmt              | <i>F</i> | <i>p</i> |
|                    | M                | M                | M                 | M                 | M                          | M                  |          |          |
|                    | (SD)             | (SD)             | (SD)              | (SD)              | (SD)                       | (SD)               |          |          |
| DIBELS Composite   | 25.93<br>(22.96) | 22.67<br>(24.72) | 138.78<br>(38.71) | 143.97<br>(42.30) | 112.85<br>(31.67)          | 121.30<br>(116.33) | 3.06     | 0.08     |
| Sentence Dictation | 7.88<br>(5.14)   | 11.24<br>(5.45)  | 25.31<br>(6.07)   | 24.21<br>(7.19)   | 17.44<br>(6.46)            | 12.97<br>(5.31)    | 11.29    | 0.001    |

*Note.* Control  $n = 96$ , Treatment (Trtmt)  $n = 67$ .

Similar to the analysis in the previous section, a two-way analysis of covariance (ANCOVA) was conducted to determine the effects of the model on ELA skills based on gender, ELL status, and ethnicity, while controlling for fall scores. Table 16 provides results from the ANCOVA analysis for each subgroup. There were no statistically significant effects found for the subgroups of gender ( $p = .23$ ), ELL Status ( $p = .10$ ), or Ethnicity ( $p = .29$ ), nor was there a significant interaction effect for gender ( $p = .17$ ), ELL Status ( $p = .66$ ), or Ethnicity ( $p = .17$ ) in the DIBELS Next Composite.

Due to the difference in mean scores on DIBELS Next Composite for males (control  $M = 137.03$ ; treatment  $M = 148.70$ ) and for students of color (control  $M = 123.15$ ; treatment  $M = 138.22$ ), additional ANCOVA analysis were conducted with the amount of *growth* from fall to spring in DIBELS Next. No statistical significance was found, but males ( $M = 128.33$ ) and students of color ( $M = 121.75$ ) in the treatment

school did show more growth than the same subgroups in the control group (males  $M = 112.21$ ; students of color  $M = 105.46$ ). In addition, students of color performed similarly to white students ( $M = 120.77$ ) in DIBELS Next growth at the treatment school and more disparity is evident in the control group (see Table 16 for Standard Deviations).

In terms of the Sentence Dictation data, there were no statistical differences between treatment and control or subgroups of gender ( $p = 0.72$ ), ELL Status ( $p = 0.28$ ), or Ethnicity ( $p = 0.65$ ), nor was there a significant interaction effect for gender ( $p = 0.48$ ), ELL Status ( $p = 0.07$ ), or Ethnicity ( $p = 0.68$ ).

Table 16

ANCOVA By Gender, ELL, and Ethnicity for English Language Arts Assessments

| Dependent Variable | Control  |                | Treatment |                | <i>F</i> | <i>p</i> |
|--------------------|----------|----------------|-----------|----------------|----------|----------|
|                    | <i>n</i> | <i>M</i> (SD)  | <i>n</i>  | <i>M</i> (SD)  |          |          |
| DIBELS Composite   |          |                |           |                |          |          |
| Gender             |          |                |           |                | 1.47     | 0.23     |
| Female             | 62       | 139.74 (41.05) | 37        | 140.14 (41.24) |          |          |
| Male               | 34       | 137.03 (34.58) | 30        | 148.70 (43.80) |          |          |
| ELL Status         |          |                |           |                | 2.71     | 0.10     |
| Non-ELL            | 72       | 146.96 (37.27) | 49        | 153.20 (41.38) |          |          |
| ELL                | 24       | 114.25 (32.63) | 18        | 118.83 (34.59) |          |          |
| Ethnicity          |          |                |           |                | 1.11     | 0.29     |
| White              | 55       | 150.44 (39.33) | 31        | 150.65 (42.78) |          |          |
| Students of Color  | 41       | 123.15 (32.15) | 36        | 138.22 (41.62) |          |          |

| Dependent Variable        | Control  |                | Treatment |                | <i>F</i> | <i>p</i> |
|---------------------------|----------|----------------|-----------|----------------|----------|----------|
|                           | <i>n</i> | <i>M</i> (SD)  | <i>n</i>  | <i>M</i> (SD)  |          |          |
| Change in DIBELS (growth) |          |                |           |                |          |          |
| Gender                    |          |                |           |                | 1.47     | 0.23     |
| Female                    | 62       | 113.21 (32.63) | 37        | 115.59 (27.70) |          |          |
| Male                      | 34       | 112.21 (30.33) | 30        | 128.33 (32.28) |          |          |
| Ethnicity                 |          |                |           |                | 1.11     | 0.29     |
| White                     | 55       | 118.36 (33.29) | 31        | 120.77 (29.79) |          |          |
| Students of Color         | 41       | 105.46 (28.06) | 36        | 121.75 (31.12) |          |          |
| Sentence Dictation        |          |                |           |                |          |          |
| Gender                    |          |                |           |                | 0.13     | 0.72     |
| Female                    | 62       | 25.82 (6.04)   | 37        | 23.87 (8.04)   |          |          |
| Male                      | 34       | 24.38 (6.10)   | 30        | 24.63 (6.08)   |          |          |
| ELL Status                |          |                |           |                | 1.19     | 0.28     |
| ELL                       | 72       | 25.69 (6.36)   | 49        | 25.94 (5.18)   |          |          |
| Non-ELL                   | 24       | 24.17 (5.05)   | 18        | 19.50 (9.63)   |          |          |
| Ethnicity                 |          |                |           |                | 0.21     | 0.65     |
| White                     | 55       | 25.76 (6.55)   | 31        | 24.81 (6.51)   |          |          |
| Students of Color         | 41       | 24.71 (5.37)   | 36        | 23.69 (7.77)   |          |          |

*Note.* Students of color represent all non-white students from the various ethnicities represented in the schools due to the low numbers of students in each individual ethnic category.

## Summary

Using a series of ANCOVAs, the researcher analyzed the data associated with each of the research questions and hypotheses in the study. Although there is statistical significance present in the analysis of data, one must be cautious of Type II errors due to the limited sample size in this study. Some potential for this model is

evident when considering mean scores and the growth of students in the language assessments for non-ELL students as well as in the reading progress of males and students of color based on the DIBELS assessment and ELPA 21 writing subtest. The inverse impact of scores for males and females on the ELPA 21 assessments overall also presents some data of interest. The sentence dictation assessment proved to be more challenging in terms of analysis due to the significant differences in the fall scores that influenced the outcomes. Overall, the model seems to show promise, and additional research may identify how and when the model may be most effective.

## **Chapter 5: Discussion, Implications, & Conclusions**

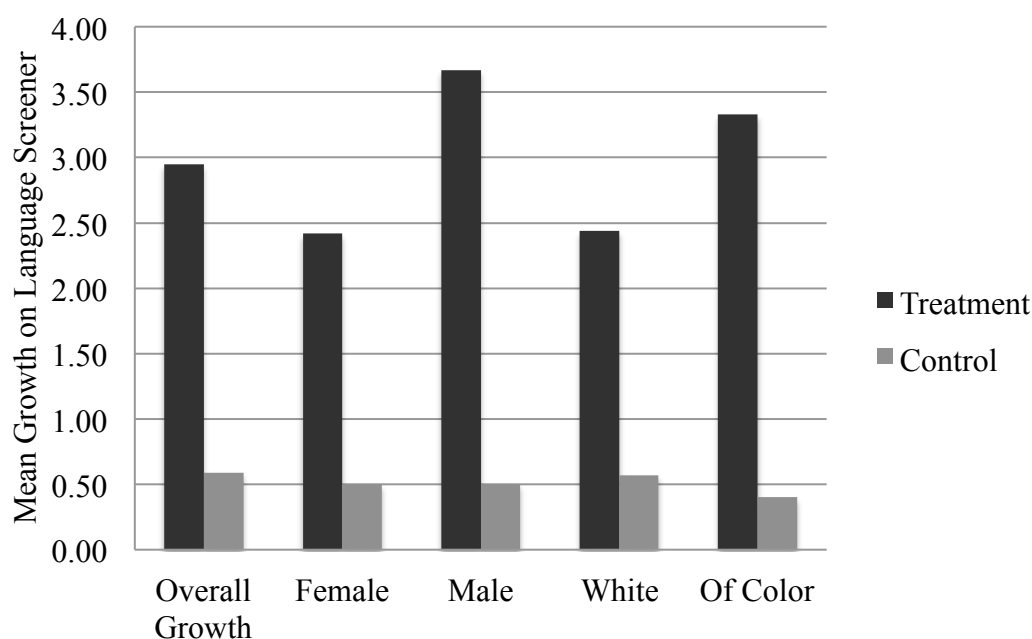
The purpose of this research study was to determine the impact of explicit language instruction in kindergarten for ELL and non-ELL students through the Walk to Language model on measures of English language development and academic achievement in English language arts. The institutional data from a Northwest school district provided an opportunity for data comparison of treatment and control schools. Kindergarten students were assessed on multiple reading, writing, and language indicators throughout the school year. The research questions were investigated through an ex post facto quantitative research model to determine the impact of the pilot program. Multiple analyses of covariance (ANCOVA) were conducted to compare scores between the treatment and control groups for each type of assessment and based on various subgroup factors such as gender, ELL status, and ethnicity.

### **Summary of Results**

It appears that there were few differences for students participating in the Walk to Language model over students in the control group. Statistically significant findings were identified in the amount of growth on the language screener for the treatment group as well as English Language Proficiency Assessment for the 21<sup>st</sup> Century (ELPA 21) reading scores and sentence dictation scores for the control group. Results from this study provide few analyses that establish statistical significance. This may be directly related to the small sample size, especially of subgroups within the study and could therefore represent Type II errors, or failure to recognize a significant difference when one really is present. There are some interesting trends that become evident in the data that could be investigated in future studies.



The first findings of significance were related to the mean growth of non-ELL students in the treatment group on the language screener. This assessment was administered by district level ELL staff and it required students to review a picture of students playing at recess. Non-ELL students were then asked to verbally share about one of the characters. Open-ended questions were used to prompt a conversation related to what the character was doing and wearing. Figure 1 provides the overall mean growth scores for each group as well as subgroup data on this assessment.



|           |        |        |        |        |        |
|-----------|--------|--------|--------|--------|--------|
| Treatment | 2.95   | 2.42   | 3.67   | 2.44   | 3.33   |
| M (SD)    | (2.52) | (1.56) | (3.39) | (1.59) | (3.06) |
| Control   | 0.59   | 0.50   | 0.50   | 0.57   | 0.40   |
| M (SD)    | (1.06) | (1.08) | (0.71) | (1.27) | (3.06) |

Figure 1. Comparison of Treatment and Control Mean Growth Scores on Language Screener;  $p < .05$ .

The treatment group ( $n = 21$ ) mean scores were higher overall and in each subgroup than the control group ( $n = 17$ ),  $p < .05$ . Males and students of color demonstrated growth at a higher level than other subgroups, indicating a positive

impact on English language development. These findings support the hypothesis that non-ELL students would benefit from language instruction. The Walk to Language model is one example of how this instruction may be provided to this group of students.

The second area of significance was related to data collected for ELL students on language development. Language skills of ELL students were measured in the fall using the PreLAS, a state approved assessment for determination of ELL eligibility, which is similar to the district language screener. The ELL students in the control group had significantly higher fall language scores based on the PreLAS data from each control school ( $M_1 = 2.00$ ,  $SD = 1.29$ ;  $M_2 = 2.8$ ,  $SD = 1.23$ ) than the treatment school ( $M = 1.45$ ,  $SD = 0.94$ );  $p < .05$ .

When considering the spring language data for ELL students as comparison, the ELPA 21 was utilized as the data collection tool. The ELPA 21 is a required assessment for all ELL students in the state. It provides an overall proficiency level as well as subscores and levels in the areas of reading, writing, listening, and speaking. Many of the differences between the treatment and control groups on the ELPA 21 were not found to be statistically significant, although the control group did show significantly higher scores on the reading score and reading level, even after controlling for fall scores from the PreLAS assessment. Figure 2 provides a comparison between treatment and control groups in each academic area measured by the ELPA 21. Using the ELPA 21 reading data, it would appear that students from the control group outperformed students in the treatment group, but differences were not significant in the other subtest areas of writing, listening, and speaking.

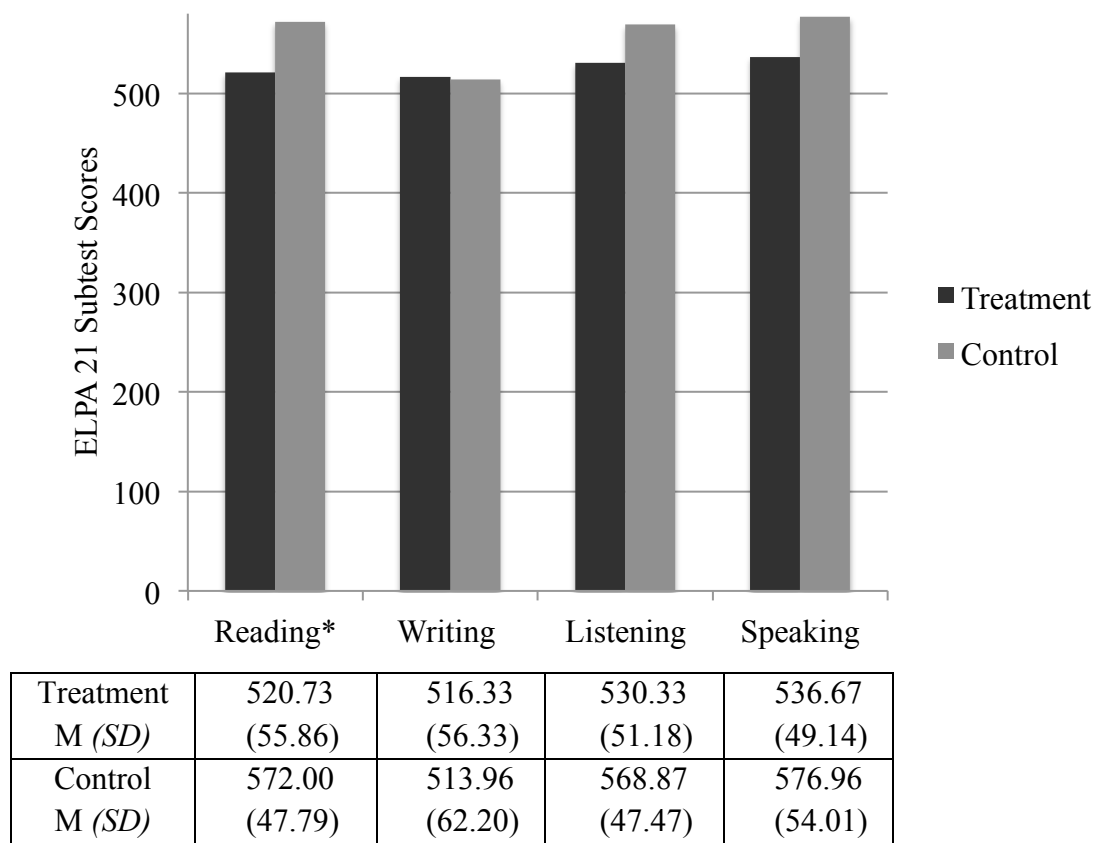


Figure 2. Comparison of Treatment and Control Group Scores on Subtests of ELPA 21. Reading is the only category where the difference represented was determined to be statistically significant (\* $p < .05$ ).

The first research question for this study evaluated the impact of Walk to Language on English Language development for ELL and non-ELL students. Statistically significant results indicate that non-ELL students in the treatment group did benefit from the model in terms of language development based on the district language screener. There were few statistically significant results for ELL students, although the ELL control group performed better in reading on the ELPA 21. The positive impact for the non-ELL group contradicts the impact for ELL students. It was surprising that more significant results were not found in terms of language development, as that was the goal of the model.

Additional data that lacked statistical significance in terms of language development raised more questions around subgroups of students. When considering the data around English language development, treatment group males had higher mean scores overall than the control group on the ELPA 21 writing subtest as did students of color from the treatment group. Males and students of color were also the subgroups that demonstrated the greatest growth on the language screener, which were statistically significant. In terms of gender, it is also noted that in the control group, females outperformed males in all subject areas of ELPA 21; yet the opposite was true for the treatment group with an exception in the area of speaking, where females maintained higher scores than males. It appears that the Walk to Language model may support male students as well as students of color in making gains in English language skills. These data comparisons were not statistically significant, indicating these differences may have been random; yet this leaves the researcher with additional questions for future research around language development.

The last area of statistical significance was found in the differences in mean fall scores and overall growth scores for the sentence dictation assessment (see Figure 3). For this assessment, classrooms teachers provided a sentence orally and students were asked to write the sentence using correct spelling and punctuation. The students in the school receiving the treatment had mean fall scores ( $M = 11.24$ ,  $SD = 5.45$ ) significantly higher than either of the control schools ( $M_1 = 7.06$ ,  $SD = 5.11$  and  $M_2 = 8.69$ ,  $SD = 5.08$ );  $p < .05$ . Differences between the groups remained in terms of growth as the treatment group mean growth scores ( $M = 12.97$ ,  $SD = 5.31$ ) were significantly lower than the control group ( $M = 17.44$ ,  $SD = 6.46$ ,  $p = .001$ ). In the

analysis, the fall scores were accounted for in the ANCOVA model and the control group still made significantly higher growth than the treatment group, although the spring scores were comparable for the treatment ( $M = 24.21$ ,  $SD = 7.18$ ) and control ( $M = 25.31$ ,  $SD = 6.07$ ) groups. It seems that in terms of sentence dictation, students in the treatment group did not make greater gains than the control group as was hypothesized for the study and research question two, although the spring scores were similar.

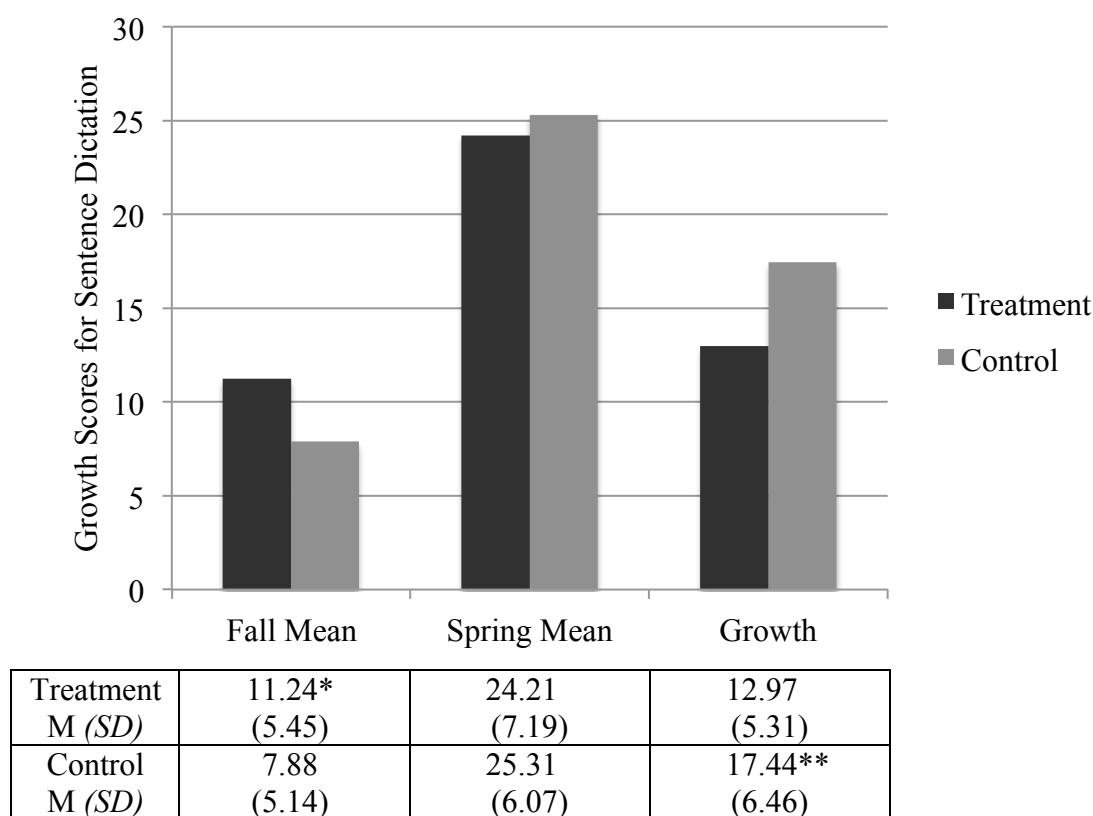


Figure 3. Mean Fall, Spring, and Growth Scores for Sentence Dictation;

\*  $p < .05$ ; \*\*  $p = .001$ .

The second research question evaluated the impact of Walk to Language on ELA skill development. The results in this area lacked consistency and significance. In terms of the data around progress in English language arts, some of the assessments seem to challenge the reading data from the ELPA 21 assessment. The stronger

performance in reading for ELLs on the ELPA 21 is contradicted by overall scores on the DIBELS Next composite scores, which were higher for the treatment group in terms of overall score and growth, yet were not found to be statistically significant ( $p = .082$ ). In addition, males and students of color in the treatment group had higher mean scores on the DIBELS Next composite, although not significant. These inconsistencies between assessments may support critics of DIBELS in terms of the validity of the assessment, but could also be related to the small sample size or chance. Students of color performed similarly to White students in the treatment group (White 120.77, students of color 121.75) and there was a higher level of discrepancy in the control group (White 118.36, of color 105.46) when considering growth in DIBELS Next.

Even with the lack of statistically significant data identified in this study, there were patterns in the data that are worth noting that did not meet the criteria for significance. Specifically, it is of interest to note the consistency with which males and students of color seem to stand out in terms of performance on the various assessments (language screener, ELPA 21, and DIBELS Next). The difference was not statistically significant for ELPA 21 and DIBELS Next, but this may be an indicator that future research should investigate the potential model benefits specifically for these two subgroups.

Overall, it must be emphasized that much of these data were not statistically significant, but one must also consider the potential for Type II errors due to the small sample size in this study (treatment group  $n = 67$ , comparison group  $n = 96$ ), especially with any subgroup data. There are results that lead to more questions in

terms of Walk to Language as a model that may support varying populations, including non-ELL students, males, and students of color, as a support for English language development and English language arts. There are many opportunities for additional research in this area.

### **Alignment of the Model with Theory**

As evident in Chapter 2, there are virtually no studies that were identified by this researcher that evaluate the effectiveness of a model such as Walk to Language. Saunders et al. (2006) investigated a separate block of language instruction for ELL students and found that there may be some small benefits from a language block for ELL learners, but also acknowledged the lack of empirical research in this area. The current study is different in that it considers all students, ELL and non-ELL students and their progress in English language development and early English language arts (ELA) skills. Both studies show potential benefit to a dedicated time allocated to language instruction with a focus on oral language skill development but demonstrate a need for further investigation.

Due to the rich theoretical basis behind this study, the model must be evaluated in terms of the foundation provided by scholars such as Bronfenbrenner, Vygotsky, Krashen, and Ellis. Bronfenbrenner's (1979) work on familial chaos provides the foundation for the work of schools to address the needs of all students. The influence of family chaos impacts learning, cognition, and language development of children (Evan & Maxwell, 1997; Hart & Risley, 2003; Vernon-Feagans et al., 2012), regardless of ELL status or family income. This is evident in this study by the progress of non-ELLs on the language screener as it lends itself toward the need for

language supports for all students. The evidence of potential growth in reading and language through the Walk to Language model may be related to role models and peers providing examples and positive interactions with others as students build experiences and common understanding around print and conversation with others (Hart & Risley, 2003).

Researchers on the impact of poverty and chaos identify differences in the overall language skills in children. Challenges related to conversational skills (Hart & Risley, 2003), interactions with print (Dickinson & Snow, 1987), vocabulary development (Hagans & Good, 2013), and higher-level decontextualized skill development (Dickinson & Snow, 1987) are evident in the literature. Walk to Language works to mitigate these discrepancies by providing a structured, predictable routine and model for exploring and practicing oral and written language skills related to content. The model provides ongoing opportunities for students to have scaffolded support and modeling of language from adults and peers in the classroom. Students receive multiple exposures to content as the language practice is directly connected to the literacy instruction and standards for the week. Teachers provide opportunities for children to reflect on text as well as practice oral response to higher level questioning. In addition to the pre-reading and language development of students, the language intervention strategies provided through the Walk to Language model support students in developing confidence and skills that support learning. Positive learning experiences early in a child's school career can help promote important academic and socio-emotional skills that support his or her learning in the future (McDermott et al., 2013).



The growth seen through these positive interactions also supports the work of Vygotsky and the sociocultural theory. The influence and power of positive modeling and social interactions lead to language that is mediated and transferred into meaning (Vygotsky, 1978). The model provided an opportunity for students to gain common experiences to understand surroundings and the cultural traits and norms of school through structured learning. The needs of students were considered as leveled groups worked to function at the appropriate developmental level or zone of proximal development to better meet the needs of students (Vygotsky, 1978). Teachers within the model provided higher-level sentence structures and scaffolding through sentence frames and sheltering techniques, which pushed student learning within the leveled group. The model provided only a limited opportunity for students to utilize their native language, if other than English, which Vygotsky would argue could support mediation of a new language (Vygotsky, 1986).

It is well acknowledged that second language acquisition (SLA) is a complex area of study (Celce-Murcia, n.d.). Over the last several years, more of the SLA research is connecting back to sociocultural theory and the foundations of language and learning from Vygotsky. Ellis' framework focuses on the instructional needs of students in providing second language principles to guide second language instruction (Ellis, 2005). Each of these instructional principles was identified in various components of the Walk to Language model. It is also widely recognized that intentional instructional strategies benefit ELL and non-ELL student learning (Celce-Murcia et al., 2014; Echevarria et al., 2006; McClure, 2009). In addition to Ellis'

framework, Krashen has done extensive work in the area of SLA and is frequently cited in literature that can be used to evaluate this model.

Overall, it could be speculated that Krashen would not likely support a stand-alone model that provided explicit language instruction, such as Walk to Language. Krashen is not a proponent of direct instruction (Krashen, 2013) or standards-based teaching (Krashen, 2014), both of which are components of this model. In a model that reflects Krashen's beliefs, the focus would be on comprehensible input that is provided as a more organic response to student questions, ideas or challenges in language use (Krashen, 2013). The teacher would have flexibility to develop lessons with students as they progress, building from their responses and interests. The focus on forms, functions, and standards in the Walk to Language model would seem lacking in meaning and relevance to students (Krashen, 2014). Another issue for Krashen may be with the oral language practice or output for students. Krashen's preference for a model would be centered on input, as it is believed that output should only occur as the learner is ready to produce language (Krashen, 2013).

There are aspects of the model that Krashen may support in terms of the content being of high interest and relevancy to students as it is tied to literature, and scaffolded with supports that make the input comprehensible for learners (Krashen, 2013). Instruction in the model also incorporated many aspects of sheltered instruction such as the use of pictures, songs, chants. The content in the model was strategically utilized to further develop vocabulary skills and deeper understanding of the content.

For the purposes of this study, it is also important to consider how the Walk to Language model fits within a broader language arts program. In addition to a dedicated language block, students had 90 minutes of language arts instruction that provided opportunities for students to read to themselves, access multiple print and electronic resources, and further develop the love of reading and language. Students also participated and practiced more informal communicative language with peers throughout the day in a variety of interactions and subject area. These additional components of an overall literacy program address many of the priorities that Krashen (2006, 2011, 2016) has identified over the years for students as they acquire a second language. In general, the Walk to Language model strives to provide a balanced approach that is mutually beneficial in terms of learning language and reinforcing content. There is a great deal of effort put into not just providing input, output, or context in isolation, but working to find creative ways to structure lessons in a relevant and meaningful way for all students.

### **Methodological Limitations of the Study**

As with any study, there were limitations and biases that should be acknowledged by the researcher. This study may be limited by the complexity of the subject matter and difficulty in replicating this study. The dynamics among school staff and students, priorities and policies of a school district, as well as the style and expertise of teachers in classrooms, all influenced the nature of the study. Although district protocols were utilized for the instruments, a variety of staff were involved in collecting assessment data, which leaves questions in terms of inter-rater reliability that could be better accounted for in future studies. Additional research would need to

be conducted to add to the generalizability of this study with a larger sample size and increased calibration of assessments and data collection.

Although many measures were in place to ensure internal validity, such as the careful selection of comparison schools, common protocols for administering and scoring each instrument, and criteria for student data to include in the study, some limitations to the internal validity should be addressed. The main threats to internal validity were in regards to the subjects, instruction, and data collection itself.

Over the course of a school year, kindergarten children develop and mature significantly. They develop social skills, confidence, academic ability, and figure out how school works. Each of the teachers had different styles, experience, and skill level in teaching language. There were opportunities for mentoring and collaboration to add a layer of accountability and to develop classroom teachers' skill in teaching language. Not only was instruction impacted by the differences in teachers, with varying levels of fidelity to the program, but the collection of data was impacted by the differences in teachers as well.

One limitation to consider lies with the nature of an ex post facto design itself. The data were gathered for a variety of systematic and programmatic purposes within the schools and district as well as an informal evaluation of the Walk to Language model. There were concerns specifically with the district language screener as it has not been evaluated for validity and was created based on other more widely used measures. This assessment provided the most significant differences in data and should therefore be considered with caution.

The greatest limitation to this study was the sample size as it was limited by the use of one treatment school, attrition, and missing data points that led to the elimination of some participants from the study. To overcome these school-based differences, future studies should use a greater number of schools and use random assignment to treatment and control groups.

In terms of the school itself, it should be noted that the researcher in this project had a personal connection to the pilot school included in this study. The school was a high poverty school with a high level of mobility that impacted the data collection for a study with fall and spring test data. In addition, the school district was in its first year of a new English language arts adoption, Journeys, and implemented full-day kindergarten in 2015-2016. These factors were the same for the pilot and the comparison schools.

### **Recommendations for Future Research & Practices**

When considering the results of this study and the overall lack of empirical evidence in the field, there is a pressing need for more research. Future work would benefit from a longitudinal study with a larger sample size and random assignment. This would provide greater clarity as to the circumstances where this model may be best utilized as an option for schools. Forthcoming studies would benefit from more comprehensive language assessments with subtests that allow for deeper evaluation of student progress in language development. A depth of assessment over a longer period of time may provide a clearer picture as to the process of acquiring English skills and how that leads to further English language arts skill development. Due to the lack of statistically significant results, researchers may want to consider how

qualitative data may enhance future studies. The field would profit from a specific focus on the potential benefits to subgroups based on gender, ELL status, and ethnicity to determine if specific groups of students benefit from this type of model.

When reflecting on other research in the field, there are recommendations that could be considered to strengthen the model presented in this study. These considerations include extending the model over multiple years, incorporating native language and biliteracy development opportunities, family involvement, and professional development.

The jump from developing oral language skills to becoming a reader can take time for many of our young students (Kieffer, 2008). Not only are there challenges around skill development, but also maturity and cognitive development. There was some evidence of this when considering the pre-reading skills assessed on the language screener and phonemic awareness components assessed by DIBELS Next. These areas showed more growth for students within this model than the more complex literacy tasks of reading, writing, or sentence dictation. In these skills, limited significant findings favored the control group. This model may be more beneficial over a course of two or three years during the kindergarten, first and second grades to reap the benefits of dedicated time for oral language development and allow individual students to mature.

In addition to time and maturity, a key element to language development is related to home language and biliteracy. For ELL students participating in a model such as Walk to Language, there would seem to be a benefit in finding ways to incorporate native language opportunities for students (Delbridge & Helman, 2016;

Vygotsky, 1986). Simple strategies could include access to dual language texts, providing writing opportunities in English and/or the students' native language, building connections between vocabulary words, spellings, and meanings in multiple languages, and encouraging families to promote home literacy skills (Delbridge & Helman, 2016). These opportunities are critical for our ELL students and provide non-ELL students new prospects for building connections and understanding. Families are a key to success in any school program. Intentional efforts could be made to engage families in the process. Families may benefit from a partnership with the school in meeting the basic needs of students as well as developing skills with parents in how to intentionally interact, ask questions, and model language in the home to develop the literacy and language skills of children (Evans & Wachs, 2010).

One cannot consider a model that is such a huge change in practice without considering the needs of teachers. This model required initial training as well as ongoing support in terms of peer coaching, time for collaboration, and planning as a team. Commitment and dedicated time to support this evolution and increase the capacity, skills, and confidence of teachers were critical to the implementation of this model. The professional development for teachers should be ongoing to help them better understand the language acquisition process and further develop the strategies necessary to support students. Change takes time and not only impacts the grade level implementing the change, but the entire building. Once the model is in place, decisions as to extension of the model to other grade levels must be considered, while keeping the schools' and/or district's capacity to support the program in the forefront.

Although there are a number of challenges associated with the Walk to Language model, it does show promise and may be beneficial to schools where native English speaking students begin school with limited English language. It is a model that provides specific and intentional support to students that may be at risk of academic failure and do not currently get this type of support in many of our schools. Walk to Language may also be a valuable model in addressing the needs of ELL students in schools with a higher percentage of ELL students, especially where there are a number of languages represented and a model to formally incorporate home language may not be possible.

### **Conclusions**

The landscape of education and the students served in our schools is ever changing. Students come to our schools with various backgrounds and abilities, and as a system there is a need for ongoing efforts towards creative and effective programming to serve children. The model for this study came as a step towards defining a way to continue to address the language needs of ELL students, but also as a means to address the lagging language skills of many native English speaking students, many of which are of color and come from impoverished backgrounds.

It is critical that schools intervene early in order to have the greatest impact on student achievement, especially for students at risk of developing reading challenges (Winsler et al., 2013). Early intervention can support students in finding success early in their school careers, which can pay dividends in later years as students gain confidence, motivation, and skills of persistence (McDermott et al., 2013).



Walk to Language is an early intervention model that was developed to support the needs of all students. It may provide a viable option for schools to consider in order to better support learners with complex needs. The focus is on a dedicated language block, outside of the regular language arts curriculum, to intentionally develop English language skills of all students. The model provides an additional exposure to core language arts content for young students with varying level of maturity, development, and language ability. In addition to the benefit to students, teachers with a dedicated block of language instruction seem to utilize time more intentionally and efficiently in working toward specific learning outcomes (Saunders et al., 2006). Teachers may also develop more confidence in teaching language and become better equipped to utilize language instruction strategies throughout the day, potentially leading to gains in other subject areas.

School leaders must decide for themselves what instructional model will best fit the needs of each school and group of students as each have unique characteristics to consider. Overall, the Walk to Language model may be a viable alternative to traditional English development opportunities for communities working to overcome the impacts of poverty and develop English language skills in all students.

## Appendix A

### Sample weekly lesson plan

| Suggested Structured Language Practice Routine: My Turn Your Turn (Choral & Echo Response - see Cue Cards book page 15 for more details)  |   |  |   |   |
|---|---|--|---|---|
| Language Function;<br>Binder tabs;<br>ELPS 1-9  | ELP<br>Standard 10:<br><br>Grammar<br>Form  | POSSIBLE<br>Prompts/Questions for<br>All Levels  | POSSIBLE<br>Responses for All Levels  | Lesson 3:<br>Please, Puppy, Please<br><br>Journeys Connections<br>and Resources   |
| <p><b>SysELD Functions:</b></p> <p><b>6.10:</b> Describe physical characteristics using sensory details</p> <p><b>6.12:</b> Describe the actions of people, animals and things using verbs and adverbs</p> <p><b>6.21:</b> Retell past actions and events</p> <p><b>ELP Standards:</b><br/>1-construct meaning from oral presentations &amp; literary &amp; informational text through grade appropriate listening, reading, &amp; viewing.</p> | <p>Academic vocab:<br/>describe</p> <p><b>Adjectives:</b><br/>soft, furry, color words, striped, spotted, size words</p> <p><b>Present progressive verbs:</b><br/>running<br/>eating<br/>jumping<br/>sleeping<br/>barking<br/>meowing<br/>digging<br/>climbing</p> <p><b>Adverbs:</b><br/>quickly<br/>slowly<br/>loudly<br/>quietly</p> | <p><b>B/EI:</b><br/>Does a/an (pet) (verb) or (verb)?</p> <p>What is the (pet) like?</p> <p><b>INT:</b><br/>What is the (pet) doing?</p> <p>What is the (pet) like?</p> <p><b>EA/A:</b><br/>How would you describe the (pet)?</p> <p>What is the (pet) doing?</p> <p>What was the (pet) doing?</p> | <p><b>B/EI:</b><br/>A/an (pet) (verb)s.<br/><br/>(Pet)s can (verb).<br/><br/>The (pet) is (adjective).<br/><br/>The pet is very (adjective).<br/><br/><b>INT:</b><br/>The (pet) is (verb)ing.<br/><br/>A/an (pet) can (verb) (adverb).<br/><br/>The (pet) is (adjective) and (adjective).<br/><br/>A/an (pet) is (adjective), but not (adjective).<br/><br/><b>EA/A:</b><br/>I would describe the (pet) as (adjective).<br/><br/>The (pet) is (verb) (adverb).<br/><br/>The (pet) was (verb) (adverb) but now he/she is (verb).</p> | <p><b>Visual Supports:</b><br/>Illustrated Word Bank for adjectives &amp; verb-see page 4.8 in Systematic ELD Binder</p> <p><b>Application Task/Assessment:</b><br/><b>B/EI:</b> Give the students a picture of a pet and verb word cards (3 or 4 different ones) and ask them to match the correct verb with the picture. Then orally state the frame 'The (animal) is (verb)ing'.</p> <p><b>INT:</b> Give the students a picture of a pet. Verbally ask student to use the frame 'The (animal) is (verb)ing' to describe the picture-consider using Talking Stick to complete this activity.</p> <p><b>EA/A:</b> Give students a writing sheet with the frame 'The _____ is (verb) (adverb)'. Students can complete the sentence and illustrate.</p> <p><b>Digital resources available in Journeys:</b><br/><i>Please Puppy Please</i></p> <p><b>Suggested materials:</b></p> <ul style="list-style-type: none"> <li>Language Support Card for lesson 3</li> <li>Picture Card Files: <ul style="list-style-type: none"> <li>Pets</li> <li>Present progressive verbs</li> <li>Adjectives</li> </ul> </li> <li>Video Clips: <ul style="list-style-type: none"> <li>Pets for Kids</li> <li>I Have a Pet</li> </ul> </li> <li>Powerpoint: Was, Now - Animals</li> </ul> |

## Appendix B

District language screener and rubric

### Oral Language Description Assessment Kindergarten

**Purpose:** To assess and measure kindergarten students' ability to use descriptive language

**Given to the following Kindergarten students:**

- ☐ At Walk-to-ELD sites, all active ELLs will be assessed and an equal number of non-ELLs will be assessed.
- ☐ At other high population sites a selection of active ELLs and English-only (or tested/not-eligible) kindergarten students will be assessed (approximately 10-12 students)

**Frequency:** Students will be assessed twice per year: by mid-October and in May

#### Assessment Prompt

Carousel picture card: 3 (school playground at recess)

#### Prompt:

Here's a picture of a playground and kids playing at recess.

I'm going to ask you some questions. Can you point to someone you want to tell me about?

Great, can you answer in complete sentences and tell me as many details as you can?

What is he/she wearing?

What does he/she look like?

Can you tell me what he/she is doing?

Is there anything else you want to tell me about him/her?

Can you tell me about someone else?

**\*\*Go back and repeat the 3 questions above. Allow student to tell you about up to 3 people.**

## District Scoring Rubric

|  | <b>Far below<br/>(1)</b>                                      | <b>Below<br/>(2)</b>  | <b>Meets<br/>(3)</b>  | <b>Exceeds<br/>(4)</b>   |
|--|---|---|---|--|
|  | Frequent errors, may impede meaning, disjointed: insufficient | Some errors, stilted or formulaic language, mostly maintains meaning; limited | Few errors, language used is consistent with developmental expectations; adequate                   | Occasional errors, especially when trying challenging structures, meaning is clear and elaborated; sophisticated       |
| <b>Addresses Purpose:</b><br>(clarity, relevance, focus, audience awareness)<br><b>ELP Standards 2, 3</b>  | Mostly off topic, random comments, 3 or less words            | 3 or more words about picture, addresses one question                         | On topic, sticks to the point for each question   | On topic, specific words, connecting picture to broader context  |
| <b>Sentence Structure:</b><br>(syntax, complete thought, clauses, phrases, flow, flexibility)<br><b>ELP Standard 9</b>                                   | Single words, response in other language                      | 2-3 word phrases, incomplete ideas  | Mostly complete sentences, some shorter phrases, flows grammatically                                | Complete, grammatically correct sentences, at least some clauses   |
| <b>Specific Grammar: Verbs, Nouns and Pronouns</b><br>(tenses, number and gender agreement, modals, singular/plural, articles)<br><b>ELP Standard 10</b> | Isolated nouns or verbs                                       | Some use of tense markers, plurals or articles, may have many errors          | Tense markers mostly correct, few errors with plurals & articles; attempts at more complex language | Consistently correct use of verb tenses, plurals and articles with very few errors; complex and specific language used |
| <b>Descriptive Language</b><br>(adjectives, phrases, adverbs, prepositions, consider specificity and precision)<br><b>ELP Standards 9, 10</b>            | Isolated adjectives or none used                              | Simple, concrete adjectives, at least one descriptive phrase                  | Multiple adjectives, some adverbs or prepositional phrases, increased specificity                   | Adjective phrases, adverbs or prepositional phrases used, more complex structures,                                     |

When scoring, place an "X" in one box per labeled row. Maximum score is 16, minimum is 4.

Student name: \_\_\_\_\_ Date: \_\_\_\_\_ Score: \_\_\_\_\_

Lang. Proficiency Level: \_\_\_\_\_

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